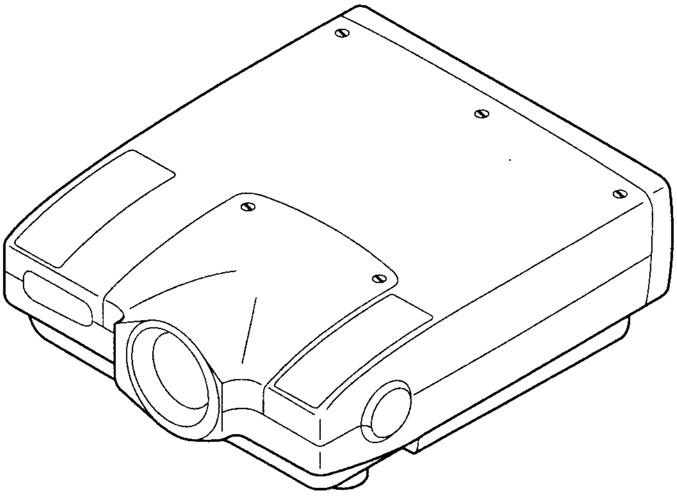
SERVICE MANUAL

MODEL	DEST.	MODEL	DEST.
VPL-FE100U	US/CND	IFB-X2000E	AEP
VPL-FE100E	AEP	PSS-2000	WORLD
VPL-FE100M	E	SU-PJ2000	WORLD



LCD DATA PROJECTOR

SONY®

⚠WARNING

This manual is intended for qualified service personnel only.
To reduce the risk of electric shock, fire or injury, do not perform any servicing other than that contained in the operating instructions unless you are qualified to do so. Refer all servicing to qualified service personnel.

⚠WARNUNG

Die Anleitung ist nur für qualifiziertes Fachpersonal bestimmt.
Alle Wartungsarbeiten dürfen nur von qualifiziertem Fachpersonal ausgeführt werden. Um die Gefahr eines elektrischen Schlages, Feuergefahr und Verletzungen zu vermeiden, sind bei Wartungsarbeiten strikt die Angaben in der Anleitung zu befolgen. Andere als die angegeben Wartungsarbeiten dürfen nur von Personen ausgeführt werden, die eine spezielle Befähigung dazu besitzen.

⚠ AVERTISSEMENT

Ce manual est destiné uniquement aux personnes compétentes en charge de l'entretien. Afin de réduire les risques de décharge électrique, d'incendie ou de blessure n'effectuer que les réparations indiquées dans le mode d'emploi à moins d'être qualifié pour en effectuer d'autres. Pour toute réparation faire appel à une personne compétente uniquement.

WARNING!!

AN INSULATED TRANSFORMER SHOULD BE USED DURING ANY SERVICE TO AVOID POSSIBLE SHOCK HAZARD, BECAUSE OF LIVE CHASSIS.
THE CHASSIS OF THIS RECEIVER IS DIRECTLY CONNECTED TO THE AC POWER LINE.

SAFETY-RELATED COMPONENT WARNING !!

COMPONENTS IDENTIFIED BY A ⚠ MARK ON THE SCHEMATIC DIAGRAMS, EXPLODED VIEWS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

ATTENTION!!

AFIN D'ÉVITER TOUT RISQUE D'ÉLECTROCUTION PROVENANT D'UN CHÂSSIS SOUS TENSION, UN TRANSFORMATEUR D'ISOLEMENT DOIT ETRE UTILISÉ LORS DE TOUT DÉPANNAGE.
LE CHÂSSIS DE CE RÉCEPTEUR EST DIRECTEMENT RACCORDÉ Á L'ALIMENTATION SECTEUR.

ATTENTION AUX COMPOSANTS RELATIFS Á LA SÉCURITÉ!!

LES COMPOSANTS IDENTIFIÉS PAR UNE MAPQUE ⚠ SUR LES SCHÉMAS DE PRINCIPE, LES VUES EXPLOSÉES ET LES LISTES DE PIECES SONT D'UNE IMPORTANCE CRITIQUE POUR LA SÉCURITÉ DU FONCTIONNEMENT. NE LES REMPLACER QUE PAR DES COMPOSANTS SONY DONT LE NUMÉRO DE PIÈCE EST INDIQUÉ DANS LE PRÉSENT MANUEL OU DANS DES SUPPLÉMENTS PUBLIÉS PAR SONY.

TABLE OF CONTENTS

1. Operating Instruction

Operating Instructions (VPL-FE100U/E/M) 1-1
Installation Manual for Dealers (VPL-FE100U/E/M) 1-22
Operating Instructions (IFB-X2000E) 1-46
Installation manual for Dealers (PSS-2000) 1-47
Installation manual (SU-PJ2000) 1-57

2. Service Informations

2-1. Circuit Boards Location 2-1
2-2. Precautions on Electrical Measurements 2-2
2-3. Cover Removal 2-3
2-4. M,QA and QB Boards Removal 2-4
2-5. Rear Panel Assy Removal 2-5
2-6. UA and H Boards Removal 2-6
2-7. C Board Removal 2-7
2-8. BA, BB and BC Boards Removal 2-8
2-9. GAA, GAB and GB Boards Removal 2-8
2-10. Power Block Removal 2-9
2-11. Optical unit and UB Board Removal 2-10
2-12. GF Board Removal 2-11
2-13. GM Board Removal 2-12
2-14. BM Board Removal 2-13
2-15. XA Board Removal 2-14
2-16. Prism Block and R/G/B CH Condenser Lens Removal 2-15

3. Theory of Operation

3-1. BB Board 3-1
  3-1-1. Main Circuit Functions 3-1
  3-1-2. Outline 3-1
  3-1-3. BB Board Block Diagram 3-2
  3-1-4. Image Data Parallelization Circuit 3-4
  3-1-5. Frame Rate Conversion Circuit 3-4
  3-1-6. Resolution Conversion Circuit 3-5
  3-1-7. gmZ3/IP90C63 Interface Circuit 3-5
  3-1-8. APA Detection Circuit 3-5
  3-1-9. Contrast and Bright Adjustment Circuit 3-6
  3-1-10. White Balance Adjustment Circuit 3-6
  3-1-11. Test Pattern Generation Circuit 3-6
  3-1-12. 3-Dimensional Gamma Adjustment Circuit 3-6

3-1-13. OSD Mix Circuit 3-7
3-1-14. ODD-EVEN Switching Circuit 3-7
3-1-15. D/A conversion Circuit 3-7
3-1-16. M Board CPU Interface 3-8
3-1-17. Clock Generation Circuit 3-8
3-1-18. Malfunctioned Part Differentiation Method 3-8
3-1-19. Precautions on Use of Oscilloscope 3-10
3-1-20. Malfunctioned Block Differentiation Table for the BB Board 3-11
3-2. C Board 3-13
3-2-1. Outline 3-13
3-2-2. Main Functions of C Board 3-13
3-2-3. C Board Block Diagram 3-14
3-2-4. Timing Generator 3-16
3-2-5. RED (GREEN, BLUE) Amplifier/Feedback Block 3-16
2-2-6. RED (GREEN, BLUE) Panel Drive 3-17
3-2-7. Timing Chart 3-17
3-3. M Board Block Diagram 3-18

4. Electrical Adjustments

4-1. Equipment Required 4-1
4-2. Preparations 4-1
4-2-1. Attaching the lens 4-1
4-2-2. Turning on the Power 4-1
4-2-3. Set the service mode. 4-1
4-2-4. Set the factory mode. 4-1
4-3. C Board Adjustments 4-1
4-3-1. SCEN Adjustments 4-1
4-3-2. SID OFST Adjustments 4-1
4-3-3. SID LVL Adjustments 4-1
4-3-4. PRG LVL Adjustment 4-1
4-3-5. R VCOM Adjustments 4-2
4-3-6. G VCOM Adjustments 4-2
4-3-7. B VCOM Adjustment 4-2
4-4. Signal Level Adjustments 4-2
4-4-1. RGB Level Checks 4-2
4-4-2. Component Level Adjustments 4-2
4-4-3. VIDEO NTSC Level Adjustments 4-3
4-4-4. VIDEO PAL Level Adjustments 4-3
4-4-5. Y/PB/PR Level Adjustments 4-3
4-4-6. 15KRGB Level Adjustments 4-3
4-4-7. W/B HIGH Adjustments 4-3
4-5. Adjustments in Replacement of Prism 4-4
4-5-1. VCOM Adjustment 4-4
4-5-2. Polarization Plate Adjustment 4-4
4-5-3. 3Dγ Adjustment (Outline) 4-4

4-5-4. 3Dγ Adjustments 4-5
4-5-5. W/B LOW Adjustments 4-5
4-6. M Board Adjustments 4-5
4-6-1. Current Detection 0 Set Adjustment 4-5

5. Troubleshooting

5-1. Indicator Section Troubleshooting 5-1
5-2. Power Supply Section Troubleshooting 5-3

6. Semiconductors

7. Exploded Views

7-1. Hood, Rear Panel Block 7-1
7-2. Chassis Block 1 7-2
7-3. Chassis Block 2 7-3
7-4. Chassis Block 3 7-4
7-5. Base Block 7-5
7-6. Optical Block 7-6

8. Electrical Parts List

9. Block Diagrams

Overall 9-1
QA 9-2
QB 9-4
BA 9-5
BB 9-12
BC 9-16
M 9-17
N 9-17
C 9-25
UC 9-26
H 9-27
GB 9-28
GAA (GAB) 9-29
GC 9-29
GF 9-29
GM 9-29

10. Diagrams

10-1. Frame Schematic Diagram 10-1
10-2. Schematic Diagrams and Printed Wiring Boards 10-3

Schematic Diagrams

QA (1/3) 10-5
QA (2/3) 10-6
QA (3/3) 10-7
QB (IFB-X2000E) 10-9
BA (1/12) 10-12
BA (2/12) 10-13
BA (3/12) 10-14
BA (4/12) 10-15
BA (5/12) 10-16
BA (6/12) 10-17
BA (7/12) 10-18
BA (8/12) 10-19
BA (9/12) 10-20
BA (10/12) 10-21
BA (11/12) 10-22
BA (12/12) 10-23
N 10-27
BB (1/18) 10-30
BB (2/18) 10-31
BB (3/18) 10-32
BB (4/18) 10-33
BB (5/18) 10-34
BB (6/18) 10-35
BB (7/18) 10-36
BB (8/18) 10-37
BB (9/18) 10-38
BB (10/18) 10-39
BB (11/18) 10-40
BB (12/18) 10-41
BB (13/18) 10-42
BB (14/18) 10-43
BB (15/18) 10-44
BB (16/18) 10-45
BB (17/18) 10-46
BB (18/18) 10-47
BC 10-51
M (1/9) 10-54
M (2/9) 10-55
M (3/9) 10-56
M (4/9) 10-57
M (5/9) 10-58
M (6/9) 10-59

M (7/9) 10-60
M (8/9) 10-61
M (9/9) 10-62
C (1/5) 10-66
UC 10-66
C (2/5) 10-67
C (3/5) 10-68
C (4/5) 10-69
C (5/5) 10-70
H (1/2) 10-73
H (2/2) 10-74
GF 10-76
GM 10-76
GB 10-79
GAA 10-81
GAB 10-83
GC 10-85
XA 10-87
XB 10-89
XC 10-89
BM 10-91
UA 10-91
UB 10-91
V 10-91

Printed Wiring Boards

QA 10-4
QB (IFB-X2000E) 10-8
BA 10-10, 11
N 10-27
BB 10-28, 29
BC 10-50
M 10-52, 53
C 10-64, 65
UC 10-64
H 10-72
GF 10-75, 77
GM 10-75, 77
GB 10-78
GAA 10-80
GAB 10-82
GC 10-84
XA 10-86
XB 10-88
XC 10-88
BM 10-90, 92
UA 10-90
UB 10-90
V 10-90

SONY

3-867-465-11(1)

LCD Data Projector

Operating Instructions GB
Mode d'emploi FR
Manual de Instrucciones ES

VPL-FE100U
VPL-FE100E
VPL-FE100M

© 1999 by Sony Corporation

Section 1
Operating Instruction

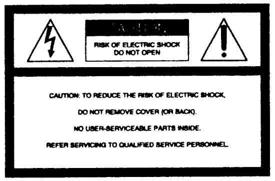
This section is extracted
from operation manual.

English

WARNING

To prevent fire or shock hazard, do not expose the unit to rain or moisture.

To avoid electrical shock, do not open the cabinet. Refer servicing to qualified personnel only.


RISK OF ELECTRIC SHOCK
DO NOT OPEN
CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK,
DO NOT REMOVE COVER (OR BACK).
NO USER-SERVICEABLE PARTS INSIDE.
REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

This symbol is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

This symbol is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

For the customers in the USA
This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

You are cautioned that any changes or modifications not expressly approved in this manual could void your authority to operate this equipment.

For the customers in Canada
This Class A digital apparatus complies with Canadian ICES-003.

For the customers in the United Kingdom

WARNING
THIS APPARATUS MUST BE EARTHED

IMPORTANT
The wires in this mains lead are coloured in accordance with the following code:

Green-and-yellow : Earth
Blue : Neutral
Brown : Live

As the colours of the wires in the mains lead of this apparatus may not correspond with the coloured markings identifying the terminals in your plug proceed as follows:
The wire which is coloured green-and-yellow must be connected to the terminal in the plug which is marked by the letter E or by the safety earth symbol ⏚ or coloured green or green-and-yellow.
The wire which is coloured blue must be connected to the terminal which is marked with the letter N or coloured black.
The wire which is coloured brown must be connected to the terminal which is marked with the letter L or coloured red.

Voor de klanten in Nederland

Bij dit produkt zijn batterijen geleverd.
Wanneer deze leeg zijn, moet u ze niet weggooien maar inleveren als KCA.

The socket-outlet should be installed near the equipment and be easily accessible.

Table of Contents

Overview

Precautions .... **4 (GB)**
Features .... **5 (GB)**
Location and Function of Controls .... **6 (GB)**
Front .... 6 (GB)
Rear .... 10 (GB)
Remote Commander .... 12 (GB)

Setting up and projecting

Precautions on Installation .... **15 (GB)**
Installing the Projector on the Floor .... **16 (GB)**
Connecting with a Computer or a VCR .... **17 (GB)**
Projecting .... **18 (GB)**

Adjustments and settings using the menu

Using the Menu .... **21 (GB)**
The PICTURE CTRL Menu .... **22 (GB)**
The INPUT SETTING Menu .... **23 (GB)**
The SET SETTING Menu .... **26 (GB)**
The SIGNAL SELECT Menu .... **27 (GB)**

Connection examples/ Index number setting

Connection Examples .... **28 (GB)**
Connecting 15k RGB/Component Equipment .... 28 (GB)
Connecting the Switcher .... 29 (GB)
Confirming the System Construction .... 30 (GB)
Setting the Index Numbers .... **31 (GB)**

Maintenance

Maintenance .... **33 (GB)**
Replacing the Lamp .... 33 (GB)
Cleaning the Air Filter .... 34 (GB)
Troubleshooting .... **35 (GB)**

Others

Specifications .... **37 (GB)**
Index .... **40 (GB)**

Precautions

On safety

- Check that the operating voltage of your unit is identical with the voltage of your local power supply. If voltage adaptation is required, consult with qualified Sony personnel.
- Should any liquid or solid object fall into the cabinet, unplug the unit and have it checked by qualified Sony personnel before operating it further.
- Unplug the unit from the wall outlet if it is not to be used for several days.
- To disconnect the cord, pull it out by the plug. Never pull the cord itself.
- The wall outlet should be near the unit and easily accessible.
- The unit is not disconnected from the AC power source (mains) as long as it is connected to the wall outlet, even if the unit itself has been turned off.
- Do not look into the lens while the lamp is on.
- Do not place your hand or objects near the ventilation holes — the air coming out is hot.

On installation

- When the projector is mounted on the ceiling, the Sony PSS-2000 Projector Suspension Support must be used for installation.
- Allow adequate air circulation to prevent internal heat build-up. Do not place the unit on surfaces (rugs, blankets, etc.) or near materials (curtains, draperies) that may block the ventilation holes. Leave space of more than 30 cm (11 7/8 inches) between the wall and the projector. Be aware that room heat rises to the ceiling; check that the temperature near the installation location is not excessive.
- Do not install the unit in a location near heat sources such as radiators or air ducts, or in a place subject to direct sunlight, excessive dust or humidity, mechanical vibration or shock.

On illumination

- To obtain the best picture, the front of the screen should not be exposed to direct lighting or sunlight.
- Ceiling-mounted spot lighting is recommended. Use a cover over fluorescent lamps to avoid lowering the contrast ratio.
- Cover any windows that face the screen with opaque draperies.
- It is desirable to install the projector in a room where floor and walls are not of light-reflecting material. If the floor and walls are of reflecting material, it is recommended that the carpet and wall paper be changed to a dark color.

On preventing internal heat build-up

After turning off the power, the cooling fan runs for about six minutes while the ON indicator flashes in green. The indicator flashes quickly for one minute. During that time, you will not be able to turn the power back on with the ON key.

Caution

The projector is equipped with ventilation holes (intake) at the bottom/front side and ventilation holes (exhaust) at the left/right side.
Do not block or place anything near these holes, or internal heat build-up may occur, causing picture degradation or damage to the projector.

On cleaning

- To keep the cabinet looking new, periodically clean it with a soft cloth. Stubborn stains may be removed with a cloth lightly dampened with a mild detergent solution. Never use strong solvents, such as thinner, benzene, or abrasive cleansers, since these will damage the cabinet.
- Avoid touching the lens. To remove dust on the lens, use a soft dry cloth. Do not use a damp cloth, detergent solution, or thinner.
- Clean the air filter in every 100 hours.

On repacking

Save the original shipping carton and packing material; they will come in handy if you ever have to ship your unit. For maximum protection, repack your unit as it was originally packed at the factory.

Features

High brightness, high picture quality

• High brightness
Adopting four 120 W UHP lamps and newly developed optical system povides high brightness (light output 3200 of ANSI lumen) and excellent uniformity on the picture.

• High resolution
Thanks to use of three 1.8-inch SXGA[1] panels with approximately 1,300,000 pixels, the projector can project the sharp picture with the resolution of 1280 × 1024 pixels.

• DRC (Digital Reality Creation)
The DRC technology allows you to obtain a finer, more detailed picture with four-times higher density than the conventional video picture.

Accepts various input signals

This projector has a built-in high performance scan converter which converts the input signals to display the 15 k RGB, DTV, HDTV, VGA[1], SVGA[1], XGA[1], SXGA[1] and UXGA[1] (fV = up to 75 Hz) signals as well as the video signals of the composite, S video and component.
The projector accepts a wide range of HDTV/DTV signals as shown in the chart below.

Format	Scanning rate (kHz)	Frame rate (Hz)*	Scanning format	Aspect ratio	Standard
1035/60i	33.75	30	2:1 interlace	16:9	BTA S-001B
1080/60i	33.75	30	2:1 interlace	16:9	SMPTE 274M/ BTA S-001B
480/60P	31.5	60	Progressive	16:9/4:3	SMPTE 293M
575/50P	31.25	50	Progressive	16:9/4:3	–
1080/48i	27	24	2:1 interlace	16:9	–
1080/50i	28.13	25	2:1 interlace	16:9	SMPTE 274M
720/60P	45	60	Progressive	16:9	SMPTE 293M
720/50P	37.5	60	Progressive	16:9	–

* Each of the frame rates is also compatible with 1/1.001.

System expandability and versatility

The projector has RS-232C/422A/PJ COM interface connectors for communication.
By combining the interface boards and signal interface switcher (not supplied), VPL-FE100U/FE100E/FE100M projection systems can be greatly expanded.
This projector also has the group and device index functions for using multiple projectors in one system.

Easy and flexible setup

• Sony's original APA (Auto Pixel Alignment) function
You can obtain the clearest picture automatically by simply pressing the APA key when the signal is input from a computer.

• Easy setup with external equipment
This projector has 48 preset data for input signals in the memory. You can get a picture properly on the screen by connecting equipment and pressing the APA key.

• Flexible setup
The lens shift function allows you to install the projector in a wide range of locations, without worrying about keystone distortion (the picture going out of square). The power focus and power zoom functions also let you change the size of the projection screen without having to move the projector.

• Stack installation
Thanks to the lens shift function, up to three projectors can be stacked, which improves the brightness of the image.

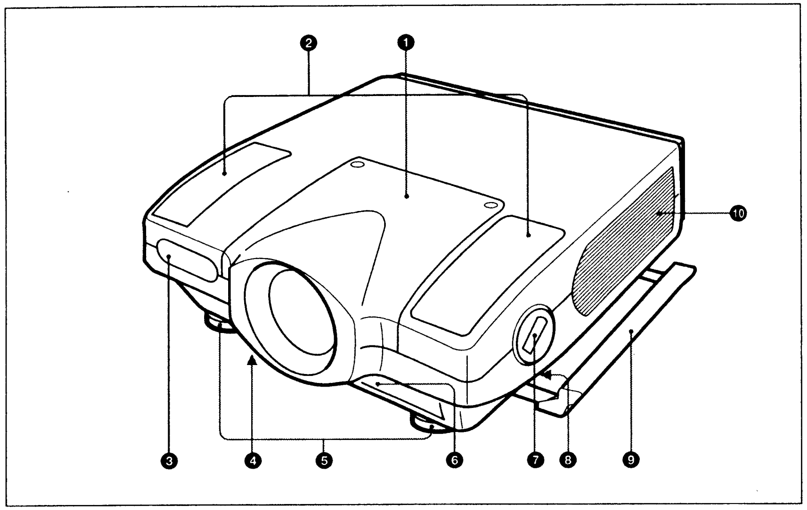
• Fail safe function
The projector uses four lamps for light source. Even if one of them has burnt out, you can still use the projector. If two lamps have burnt out, the projector will automatically enter into standby mode.

---

[1] VGA, SVGA, XGA, SXGA and UXGA are the registered trademarks of the International Business Machines Corporation, U.S.A.

Location and Function of Controls

Front



① Lens mount part
When attaching the optional lens, consult with the Sony service personnel.

② Speaker

③ Front remote control (SIRCS) detector

④ Bottom ventilation holes (intake)
Do not block the holes.

⑤ Adjusters
Use the adjusters to keep the projector level if it is installed on an uneven surface.

⑥ Front ventilation holes (intake)
Do not block the holes.

⑦ Adjuster button and lever
Press the button to raise the lever for adjusting the height of the adjuster.

⑧ Handle lever (left and right sides)
Use the lever for putting away the carrying handle.

⑨ Carrying handle (left and right sides)
Pull out the handle for carrying the projector.

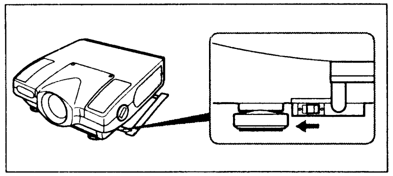
⑩ Left and right side ventilation holes (exhaust)
Do not place anything within the 30 cm (11 $^{7}/_{8}$ inches) range from these holes or block them.

Notes

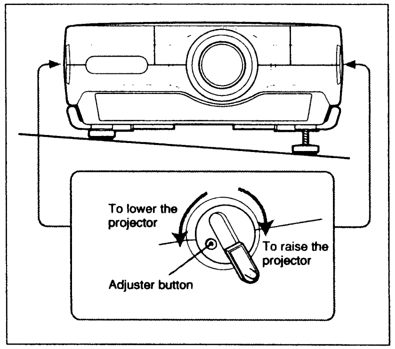
- Do not block the ventilation holes, or internal heat build-up may occur, causing fire or damage to the projector.
- Do not place anything near the ventilation holes or touch these holes as the temperature will be very high.

Using the carrying handles

Pull out to use for carrying the projector. To put away the handle, slide the handle lever forward.



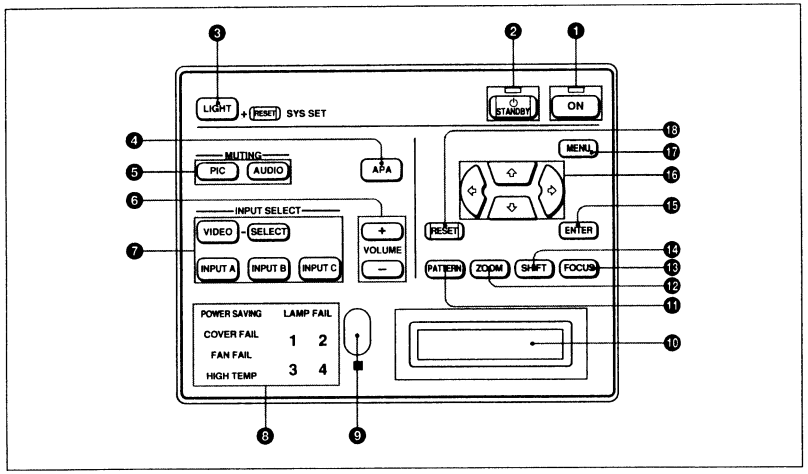
Using the adjusters



1. Press the adjuster button.
   The adjuster lever comes out.
2. Turn the lever to adjust the height so that the projector becomes level.
3. Replace the adjuster lever after use.

Location and Function of Controls

Control panel



① ON key and indicator
Press to turn on the power of the projector.
The indicator lights when the key is pressed.
The indicator flashes for about six minutes after the power is turned off by pressing the STANDBY key, as the fan runs for six minutes to cool down the inside of the projector. The indicator flashes quickly for one minute, during which you will not be able to turn the power back on with the ON key.

② STANDBY key and indicator
Press to make the projector enter standby mode.
The indicator lights to indicate that the projector is in standby mode.

③ LIGHT key
Illuminates the key indicators in orange when the projector is turned on. Illuminates the indicators for the relative keys in green when this key is pressed during operation. Press again to turn off the indicators.

Pressing this key and the RESET key simultaneously has the same function as the SYS SET key on the Remote Commander. Use when the PC-3000 signal interface switcher is used in the system or the system connections are changed.

④ APA (Auto Pixel Alignment) key
Adjusts the position of the picture on the screen automatically so that the picture is clearly visible when the signals are input from a computer.

⑤ MUTING keys
Cut off the picture or sound temporarily.
- **PIC:** Press to cut off the picture. Press again to restore the picture.
- **AUDIO:** Press to cut off the sound output from the speakers or the AUDIO OUT jacks. Press again or press the VOLUME + key to restore the sound.

⑥ VOLUME +/– keys
Adjust the volume of the built-in speakers and output level of the AUDIO OUT jacks.
+ : Increases the volume.
– : Decreases the volume.

⑦ INPUT SELECT keys
Select the input signal.
- **VIDEO:** Selects the video signal input from the VIDEO or S VIDEO connectors and the audio signal input from the AUDIO IN L/R jacks. To switch the S VIDEO and VIDEO connectors, use the SELECT key.
- **SELECT:** Each time you press this key, the input video signal is switched between the VIDEO and S VIDEO connectors.
- **INPUT A:** Selects the audio and video signals input from the INPUT A connectors.
- **INPUT B:** Selects the signal input from the connectors on the optional interface board which is installed in the INPUT B section. When the IFB-12A interface board is installed and the output mode is selected on the IFB-12A, the key does not function.
- **INPUT C:** Selects the signal input from the connectors on the optional interface board which is installed in the INPUT C section.

Note on the VPL-FE100E model

The optional IFB-X2000E interface board is required to select VIDEO.

⑧ Indicators
- **POWER SAVING:** Lights when the projector is in power saving mode. When POWER SAVING in the SET SETTING menu is set to ON, the projector goes into the power saving mode if no signal is input for 10 minutes. Although the lamp goes out, the cooling fan keeps running. In the power saving mode, only the STANDBY key functions for the first 30 seconds. The power saving mode is canceled when a signal is input or any key is pressed.
- **COVER FAIL:** Lights when the lamp cover or air filter cover is not secured firmly.
- **FAN FAIL:** Lights when the fan is broken.
- **HIGH TEMP:** Lights when temperature inside the projector becomes unusually high.
- **LAMP FAIL:** When the lamp life has reached the end, the indicator of that lamp lights.

⑨ Rear remote control (SIRCS) detector

⑩ Message display window
Displays the signal status, timer and error messages about the input signals.

⑪ PATTERN key
Displays a HATCH pattern on the screen for focus, zoom, and shift adjustments. Press again to turn off the HATCH pattern.

⑫ ZOOM key
Enters the zoom adjustment mode. When the key is pressed, the relative keys light in green.
Next adjust the zoom using the arrow keys.
↑: Enlarges the picture size.
↓: Reduces the picture size.

Note
If the VPLL-2075, VPLL-2014, VPLL-2009 or VPLL-3050 optional lens is installed, you cannot adjust the zoom.

⑬ FOCUS key
Enters the focus adjustment mode. When the key is pressed, the relative keys light in green.
Next adjust the focus using the arrow keys.
↑: Focuses on a forward picture.
↓: Focuses on a picture further back.

⑭ SHIFT (lens shift) key
Enters the shift adjustment mode. When the key is pressed, the relative keys light in green.
Next adjust the vertical position of the picture using the arrow keys.
↑: Moves the picture upward.
↓: Moves the picture downward.

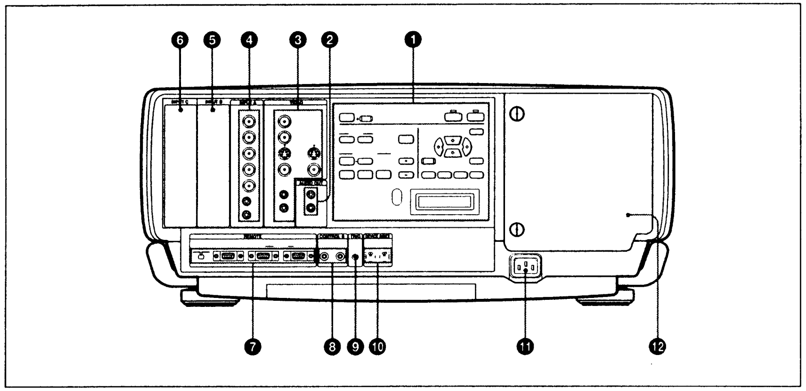
⑮ ENTER key
Stores the settings in the menu.

⑯ Arrow keys (↑/↓/←/→)
Used to adjust the picture after pressing the ZOOM, FOCUS or SHIFT key. Also used to move the cursor or adjust the value in the menu.

⑰ MENU key
Displays the menu on the screen. When the key is pressed, the relative keys light in green.
Press again to turn off the menu.

⑱ RESET key
Resets the adjusted value of an item to its factory preset value. This key functions when the menu or a setting item is displayed on the screen.

Rear



① Control panel
For details, see pages 8 (GB) and 9 (GB).

② AUDIO OUT L/R jacks (phono type)
Connect to external active speakers.
The volume of the speakers can be controlled by the VOLUME keys on the Remote Commander or the control panel.

③ VIDEO connectors
Connect to external video equipment, such as a VCR.

- **Y IN/C IN (BNC type):** Connect to the Y and C video outputs of the video equipment.
- **S VIDEO IN (mini DIN 4-pin):** Connects to the Y/C video output of the video equipment.
- **S VIDEO OUT (mini DIN 4-pin):** Used as loop-through output via the Y/C IN connectors or the S VIDEO IN connector.
- **VIDEO IN (BNC type):** Connects to the composite video output connector of the video equipment.
- **VIDEO OUT (BNC type):** Used as loop-through output of the VIDEO IN connector.
- **AUDIO IN L (MONO)/R jacks (phono type):** Connect to the audio output jacks of equipment, such as a VCR. For stereo equipment, use both the L and R jacks; for monaural equipment, use the L (MONO) jack only.

Note
If you have video equipment connected to both the Y/C IN and S VIDEO IN connectors, the signal from the Y/C IN connectors are selected prior to the S VIDEO IN connector. When projecting video connected to the S VIDEO IN connector, be sure not to connect any cable to the Y/C IN connectors.

Note on the VPL-FE100E model

The optional IFB-X2000E interface board is required for using the VIDEO connectors.

④ INPUT A connectors

- **RGB input connectors (R/R-Y/P_R, G/Y, B/B-Y/P_B, SYNC/HD, VD) (BNC type):** Connect to the video outputs of equipment such as a computer or a video camera.
  According to the connected equipment, the RGB, component (R-Y, Y, B-Y), HDTV (YP_BP_R or GBR) or DTV (YP_BP_R or GBR) signal is selected.
- **AUDIO IN L (MONO)/R jacks (phono type):** Connect to the audio output jacks of equipment such as a computer or a video camera. For stereo equipment, use both the L and R jacks; for monaural equipment, use the L (MONO) jack only.

Note
The INPUT A connectors do not function when the PC-3000 signal interface switcher is connected.

⑤ Signal interface board attachment part (INPUT B)
Optional signal interface board can be attached according to your requirements. If you install the IFB-12A interface board to this section and select the output mode, you can output the signal input through the INPUT A connectors.
For details on installing the interface boards, consult with qualified Sony personnel.

⑥ Signal interface board attachment part (INPUT C)
Optional signal interface board can be attached according to your requirements.

Note
You cannot select the output mode when attaching the IFB-12A interface board.

⑦ REMOTE connectors
Used to expand system capability.

- **RS-232C/RS-422A select switch:** Selects according to the interface connected to the RS-232C/RS-422A connector.
- **RS-232C/RS-422A connector (D-sub 9-pin, female):** Connect to a computer to operate the projector from the computer.
- **PJ COM IN/OUT connectors (D-sub 9-pin, female):** The connectors conform to the RS-485 standards and are used to expand system capability for Sony projectors.

For details on connections, see the PJ COM protocol manual for Sony projectors.

⑧ CONTROL S IN/OUT jacks (stereo minijack)
Connect to the control S jacks of other Sony equipment.

- **CONTROL S IN/PLUG IN POWER (DC 5 V output) jack:** Connects to the CONTROL S OUT jack of the supplied Remote Commander when using as a wired Remote Commander. In this case, you do not need to install the batteries in the Remote Commander, since the power is supplied from this jack.
- **CONTROL S OUT jack:** Outputs the control S signal.

Note
When connecting the remote commander cable to the CONTROL S IN jack, the remote control detectors will not function.

⑨ TRIG (trigger output) jack (monaural minijack)
The signal is transmitted from this jack to the connected equipment whether the projector is on or off. (This is not a power source for external equipment.) Approximately 12 V DC signal is output when the projector power is on. The signal is 0 volt level output when the projector power is off.

⑩ DEVICE INDEX switch
Set the device index number of the projector when using multiple projectors. You can set the numbers between "01" and "99". It is set to "01" at the factory. You can also set the group index number in the menu for system setup.

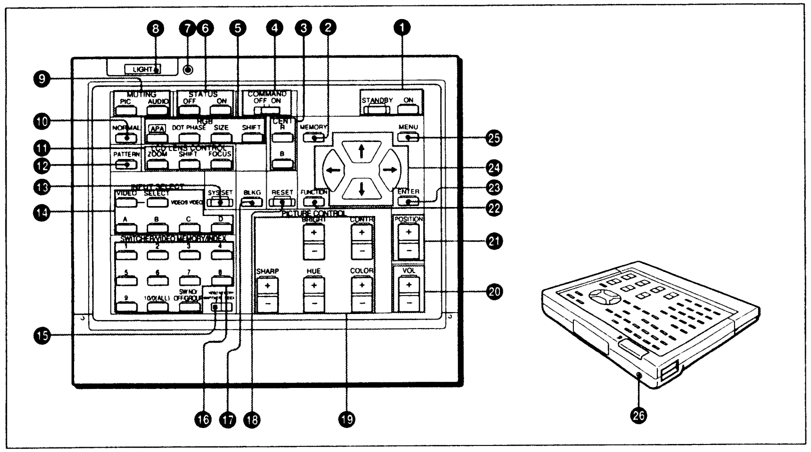
Note
Do not set the device index number to "00". If you do, the projector will be operated only with the keys on the control panel.

⑪ AC IN socket
Connect the supplied AC Power cord.

⑫ Lamp cover

Remote Commander

The Remote Commander can be used as a wireless or wired Remote Commander. The keys on the Remote Commander with the same names function the same as those on the control panel of the projector.
For details on control panel keys on the projector, see pages 8 (GB) and 9 (GB).



① ON/STANDBY keys

② MEMORY key

The key does not function with this projector.

③ CENT R/B keys

The keys do not function with this projector.

④ COMMAND ON/OFF key

No keys except for the LIGHT button on the Remote Commander function when this switch is set to OFF. This saves battery power.

⑤ RGB keys

Adjust the picture.

APA: The key functions the same as the APA key on the control panel.

DOT PHASE: Press to adjust the phase of the LCD panels and the input signals (except for 15k RGB/video/HDTV/DTV signals). After pressing this key, adjust the position of the picture using the four arrow keys so that the clearest picture is obtained.

SIZE: Enters the size adjustment mode for the input signal. Next adjust the horizontal size of the picture using the arrow keys.
←: to reduce horizontal size
→: to expand horizontal size

SHIFT: Enters the shift adjustment mode for the input signal. Next adjust the position of the picture using the four arrow keys. The picture shifts in the direction of the arrow on the pressed key.

⑥ STATUS ON/OFF keys

Press OFF to eliminate the on-screen display.
Press ON to restore the on-screen display.

Note

The menus and warning messages appear even if the OFF key is pressed.

⑦ Transmission indicator

The light goes on each time a key is pressed. If the indicator does not light, replace the batteries.

⑧ LIGHT button

Illuminates the key indicators when the COMMAND switch is set to ON. If the switch is set to OFF, only the COMMAND switch is illuminated.
If you do not press any key on the Commander for more than 30 seconds, the key indicators turn off automatically. The indicators also turn off if you press the LIGHT button again.

⑨ MUTING keys

⑩ NORMAL key

The key does not function with this projector.

⑪ LCD LENS CONTROL keys

Press one of the ZOOM, SHIFT and FOCUS keys and then the arrow keys (↑ or ↓).

⑫ PATTERN key

⑬ SYS SET (system set) key

When the PC-3000 signal interface switcher is used in the system or the system connections are changed, press this key.

Note

After connecting the PC-3000 switcher and pressing the SYS SET key, the input channel is set to SW1-1 when connecting a single switcher, or to SW1-2 when connecting two or more switchers.

⑭ INPUT SELECT keys

The D key does not function with this projector.

⑮ SWITCHER/VIDEO MEMORY/INDEX select switch

Selects the function of the SWITCHER/VIDEO MEMORY/INDEX keys.

SWITCHER: selects the input from the PC-3000 switcher.

VIDEO MEMORY: The position does not function with this projector.

INDEX: selects a projector by its index number when multiple projectors are used.

⑯ SWITCHER/VIDEO MEMORY/INDEX keys

When **the SWITCHER/VIDEO MEMORY/ INDEX select switch** is set to **SWITCHER**

When the PC-3000 switcher is connected to the projector, press a number key (1 to 8) to select the input from the switcher. Number key 9 does not function.

To select an input when multiple switchers are connected, press the SW NO/OFF/GROUP key. Next press the switcher number (1 to 8) and the input number (1 to 8) in sequence. Be sure to press the keys one after another within 2 seconds.
e.g. To select input 4 of switcher 2, press the keys as follows: SW NO → 2 → 4.

When **the SWITCHER/VIDEO MEMORY/ INDEX select switch** is set to **INDEX**

Used to specify the device or group index number.

⑰ BLKG (blanking) adjustment key

Enters the blanking adjustment mode.
Next, press the ↑/↓ key to select the position to be adjusted on the screen, and then adjust the position using the ←/→ keys.

⑱ RESET key

⑲ PICTURE CONTROL +/– keys

Adjust the picture conditions: CONTR (contrast), BRIGHT (brightness), COLOR, HUE and SHARP (sharpness).

⑳ VOL (volume) +/– keys

㉑ POSITION +/– keys

These keys do not function with this projector.

㉒ FUNCTION key

The key does not function with this projector.

㉓ ENTER key

㉔ Arrow keys

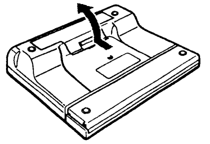
㉕ MENU key

㉖ CONTROL S OUT jack

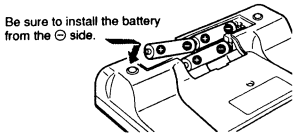
Connect the supplied remote control cable to this jack and to the CONTROL S IN jack of the projector for wired remote control operation.
When the Commander is connected to the CONTROL S IN/PLUG IN POWER jack of the projector via the remote control cable (stereo), the power for the Remote Commander is supplied from the projector.

Battery installation

1 Push to open the lid.



2 Install three R6 (size AA) batteries (supplied) with the polarities correctly aligned.



3 Replace the lid.

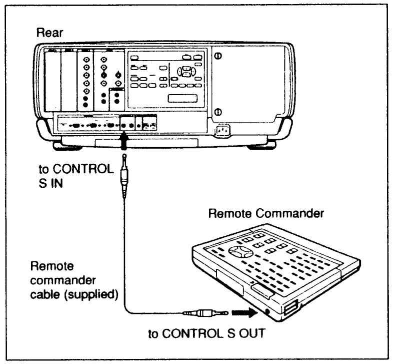
Notes on batteries

- Make sure that the battery orientation is correct when inserting batteries.
- Do not mix old battery with new one, or different types of batteries.
- If you will not use the Remote Commander for a long time, remove the batteries to avoid damage from battery leakage. If batteries have leaked, remove them, wipe the battery compartment dry and replace the batteries with new ones.

Notes on wireless Remote Commander operation

- Be sure that there is nothing to obstruct the infrared beam between the Remote Commander and the projector.
- The operation range is limited. The shorter the distance between the Remote Commander and the projector, the wider the angle within which the commander can control the projector.
- The remote control detectors on the projector do not operate when connecting the remote commander cable to the CONTROL S IN jack. If you wish to use the Remote Commander as a wireless Remote Commander, be sure to remove the remote commander cable from both the Remote Commander and the projector.

To connect the Remote Commander to the projector



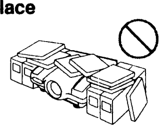
Note on wired Remote Commander operation using the supplied remote commander cable (stereo)

You do not need to install the batteries since the power is supplied from the CONTROL S IN jack on the projector. In this case, the batteries are not consumed.

Precautions on Installation

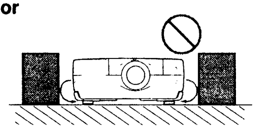
Do not install the projector in the following situations. These installations may cause malfunction or damage to the projector.

Do not install the projector in an ill-ventilated place



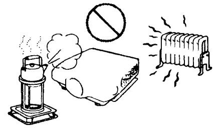
The projector is equipped with ventilation holes for intake on the bottom and front and ventilation holes for exhaust on the left and right sides to prevent internal heat build-up. Do not block these ventilation holes and allow adequate air circulation at an installation location.

Do not place any object beside the projector

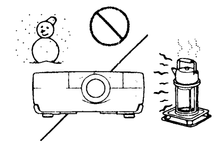


If you put something beside the ventilation holes on the sides, the exhaust may be inhaled into the projector through the ventilation holes (intake) at the bottom, causing the internal temperature to rise and thereby activating the protection circuit. Install the projector so that the exhaust is not blocked.

Do not install the projector in a location where temperature or humidity is very high

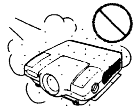


Avoid installing the projector in a location where temperature may rise or fall rapidly

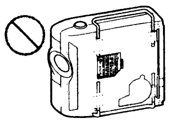


Be careful of air-conditioning and heating in a room where the projector is installed, as sudden changes in temperature may lead to moisture condensation and cause damage to the projector.

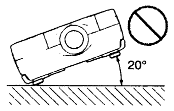
Avoid installing the projector in a location subject to excessive dust



Do not use the projector while laying it on its side

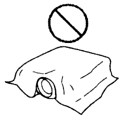


Do not tilt the projector when in use



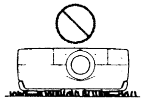
Avoid tilting the projector more than 20 degrees or installing it other than on the floor and ceiling. Such installations may cause malfunctions such as color irregularity or shortening of lamp life.

Do not cover the ventilation holes (exhaust)



Do not cover the front ventilation holes; otherwise, internal heat may build up.

Do not install the projector on a deep-pile carpet



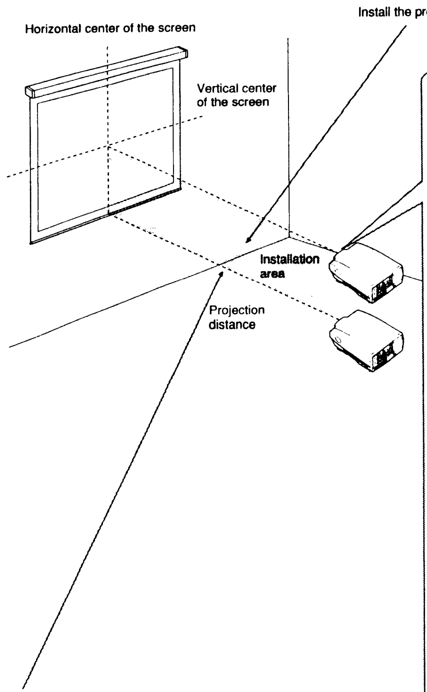
If you install the projector on a deep-pile carpet, the ventilation holes (intake) at the bottom may be blocked, causing an internal heat build-up.

Installing the Projector on the Floor

This section describes the installation arrangements for installing the projector on the floor.

For ceiling installation, consult with qualified Sony personnel.

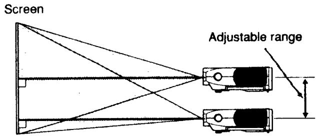
For details on installation examples with projection distances, see the supplied "Projection Distance Charts."


Horizontal center of the screen
Install the projector so that the tip of the lens is within this area.
Vertical center of the screen
Installation area
Projection distance

The distance between the lens and the screen varies depending on the size of the screen and the attached lens. Use the charts for installation examples in the supplied "Projection Distance Charts."

Adjust the vertical and horizontal positioning of the projector.

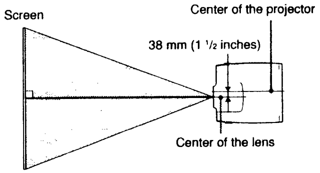
Vertical positioning (side view)


Screen
Adjustable range

You can adjust the angle of projection by performing the shift adjustment (page 20 (GB)).

- Install the projector so that the center of the lens is between just above the bottom edge of the screen and the center of the screen.
- When using the VPLL-2009, make sure that the center of the lens is aligned with the vertical center of the screen.

Horizontal positioning (top view)


Screen
Center of the projector
38 mm (1 ¹/₂ inches)
Center of the lens

Adjust the horizontal positioning of the projector so that the center of the lens is aligned with the horizontal center of the screen.

Connecting with a Computer or a VCR

This section describes how to connect the projector with a computer, VCR, and external active speakers.

For details on how to connect other equipment, see pages 28 (GB) to 30 (GB).

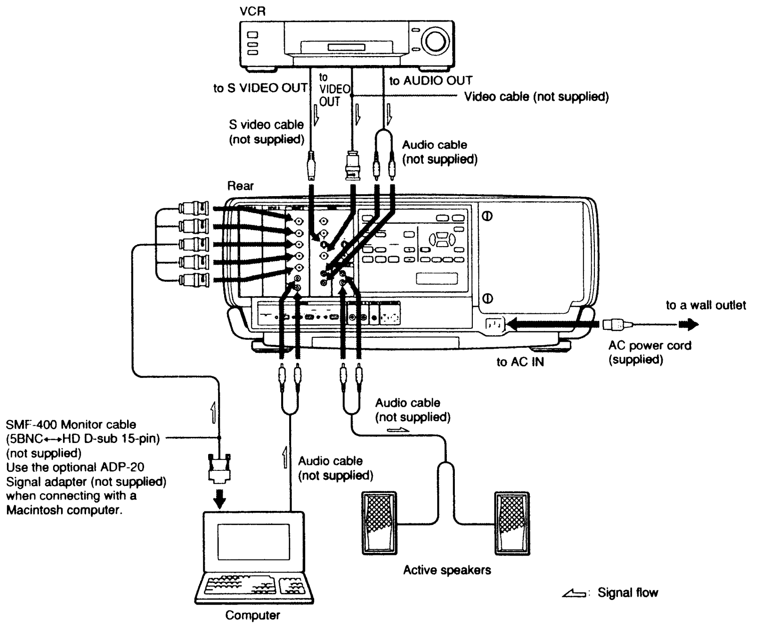
Also refer to the instruction manuals of the equipment to be connected.

When making connections, be sure to:

- turn off all equipment before making any connections.
- use the proper cables for each connection.
- insert the plugs of the cables properly; plugs that are not fully inserted often generate noise. When pulling out a cable, be sure to pull it out by the plug, not the cable itself.

Note on the VPL-FE100E model

The optional IFB-X2000E interface board is required for using the VIDEO connectors.

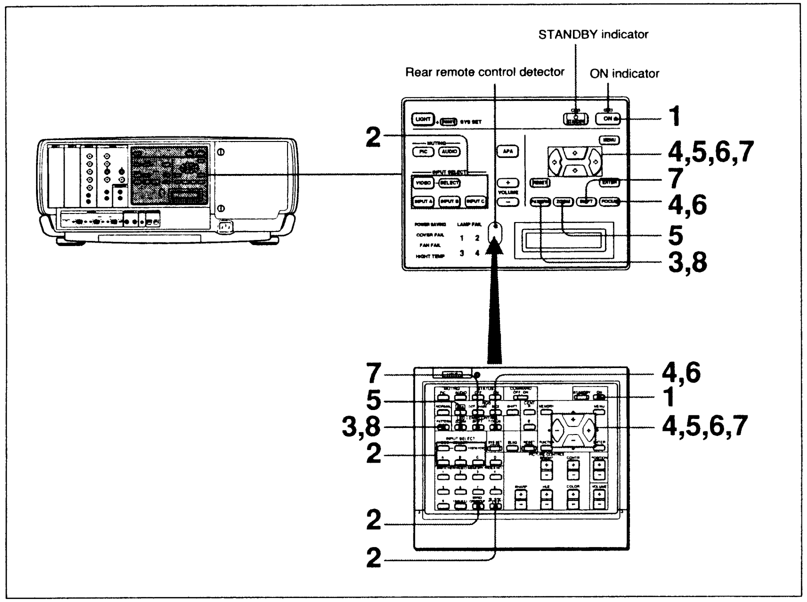

VCR
to S VIDEO OUT
to VIDEO OUT
to AUDIO OUT
Video cable (not supplied)
S video cable (not supplied)
Audio cable (not supplied)
Rear
to a wall outlet
to AC IN
AC power cord (supplied)
SMF-400 Monitor cable (5BNC↔HD D-sub 15-pin) (not supplied)
Use the optional ADP-20 Signal adapter (not supplied) when connecting with a Macintosh computer.
Audio cable (not supplied)
Audio cable (not supplied)
Active speakers
Computer
: Signal flow

Note

Set INPUT-A in the SIGNAL SELECT menu to COMPUTER.

For details, see page 27 (GB).

Projecting



1 Press the ON key on the Remote Commander or the control panel.

The ON indicator lights in green.

2 Turn on the power of equipment connected to the projector. Press the INPUT SELECT keys on the Remote Commander or the control panel to select the input source.

VIDEO: Selects the video signal input from the VIDEO or S VIDEO connectors and the audio signal input from the AUDIO IN L/R jacks. To switch the VIDEO or S VIDEO connectors, use the SELECT key.

SELECT: Each time you press this key, the input signal is switched between VIDEO and S VIDEO.

INPUT A: Selects the audio and video signals input from the INPUT A connectors.

INPUT B: Selects the signal input from the connectors on the optional interface board which is installed in the INPUT B section.

INPUT C: Selects the signal input from the connectors on the optional interface board which is installed in the INPUT C section.

When you input the signal from equipment connected to the PC-3000 signal interface switcher (not supplied), set the SWITCHER/VIDEO MEMORY/INDEX select switch on the Remote Commander to the SWITCHER position and press the number keys to select the input. When multiple switchers are connected, press the SW NO/OFF/GROUP key, then press the number keys to select the input.

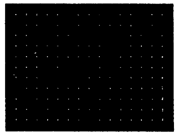
Note

Press the SYS SET key when you make the system connections using the PC-3000 switcher.

Note on the VPL-FE100E model

The optional IFB-X2000E is required for selecting VIDEO.

3 Press the PATTERN key on the Remote Commander or the control panel to display the HATCH pattern.



4 Press the FOCUS key then the ↑ or ↓ key on the Remote Commander or the control panel to adjust the focus.

"FOCUS" appears on the screen during adjustment.

5 Press the ZOOM key then the ↑ or ↓ key on the Remote Commander or the control panel to adjust the picture size.

"ZOOM" appears on the screen during adjustment.

Note

If the optional VPLL-2075, VPLL-2014, VPLL-2009 or VPLL-3050 lens is installed, you cannot adjust the zoom.

6 Press the FOCUS and arrow keys on the Remote Commander or the control panel to adjust the focus again.

"FOCUS" appears on the screen during adjustment.

(continued)

7 Press the SHIFT key then the arrow keys on the Remote Commander or the control panel to adjust the vertical position of the picture.

"PICTURE SHIFT" appears on the screen during adjustment.

8 Press the PATTERN key again to clear the HATCH pattern.

To	Press
Adjust the volume	the VOLUME +/– keys.
Cut off the sound	the AUDIO MUTING key (also cuts off the signal output from the AUDIO OUT jacks.) To restore the sound, press the AUDIO MUTING key again or press the VOLUME + key.
Cut off the picture	the PIC MUTING key. To restore the picture, press the PIC MUTING key again.

Note

Do not look into the lens when the projector lamp is on.

To turn off the power

1 Press the STANDBY key on the Remote Commander or the control panel.

The ON indicator flashes in green and the cooling fan keeps running for about six minutes to reduce the internal heat. The ON indicator flashes quickly for one minute. During this time, you will not be able to turn the power back on. After about one minute, you can turn on the power with the ON key.

When the fan stops running, the STANDBY indicator lights in red.

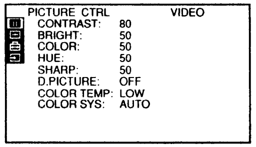
Note

To extend the lamp life, do not turn off the power for at least 10 minutes after turning on the power.

Using the Menu

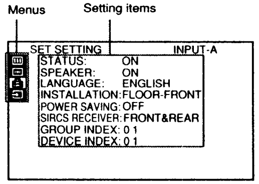
The projector is equipped with an on-screen menu for making various adjustments and settings.
Unadjustable items are not displayed in the menu.
To change the language used in the menu, see page 26 (GB).

1 Press the MENU key.
The menu display appears.
The menu presently selected is highlighted in yellow.



```
PICTURE  CTRL               VIDEO
  CONTRAST:     80
  BRIGHT:       50
  COLOR:        50
  HUE:          50
  SHARP:        50
  D.PICTURE:    OFF
  COLOR TEMP:   LOW
  COLOR SYS:    AUTO
```

2 Use the ↑ or ↓ key to select a menu, then press the → or the ENTER key.
The setting items of the selected menu are displayed.



```
SET SETTING                 INPUT-A
 STATUS:          ON
 SPEAKER:         ON
 LANGUAGE:        ENGLISH
 INSTALLATION:FLOOR-FRONT
 POWER SAVING: OFF
 SIRCS RECEIVER: FRONT&REAR
 GROUP INDEX: 0 1
 DEVICE INDEX: 0 1
```

3 Use the ↑ or ↓ key to select the item, then press the → or the ENTER key.

4 Adjust an item.
- **When changing the adjustment level:**
  To increase the number, press the ↑ or → key.
  To decrease the number, press the ↓ or ← key.
  Press the ENTER key to restore the original screen.
- **When changing the setting:**
  Press the ↑ or ↓ key to change the setting, then press the ← or the ENTER key.
  The original screen is restored.

For details on setting individual items, see the relevant menu pages.

To erase the menu display

Press the MENU key. The menu display also disappears automatically if no key is pressed for one minute.

To reset settings that have been adjusted

Press the RESET key.
"Reset complete!" appears on the screen and the settings appearing on the screen will be reset to their factory preset values.

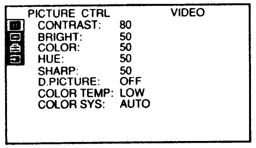
Items that can be reset are as follows:
CONTRAST, BRIGHT, COLOR, HUE, SHARP, DOT PHASE, SIZE, SHIFT and BLANKING.

About the memory of the settings

The settings are automatically stored in the projector memory.

The PICTURE CTRL Menu

The PICTURE CTRL menu is used for adjusting the picture. Unadjustable items are not displayed in the menu.



```
PICTURE CTRL               VIDEO
  CONTRAST:    80
  BRIGHT:      50
  COLOR:       50
  HUE:         50
  SHARP:       50
  D.PICTURE:   OFF
  COLOR TEMP:  LOW
  COLOR SYS:   AUTO
```

CONTRAST

Adjusts the picture contrast.
The higher the setting, the greater the contrast.
The lower the setting, the lower the contrast.

BRIGHT (Brightness)

Adjusts the picture brightness.
The higher the setting, the brighter the picture.
The lower the setting, the darker the picture.

COLOR

Adjusts color intensity.
The higher the setting, the greater the intensity.
The lower the setting, the lower the intensity.

HUE

Adjusts skin tones.
At high settings, the picture becomes greenish.
At low settings, the picture becomes purplish.

SHARP (Sharpness)

Adjusts the picture sharpness.
The higher the setting, the sharper the picture.
The lower the setting, the softer the picture.

D. (Dynamic) PICTURE

Emphasizes the black color.

ON: Emphasizes the black color to produce a bolder "dynamic" picture.

OFF: Reproduces the dark portions of the picture accurately, in accordance with the source signal.

COLOR TEMP (temperature)

Adjusts the color temperature.

HIGH: Makes the white color bluish.

LOW: Makes the white color reddish.

COLOR SYS (system)

Selects the color system of the input signal.
Normally, set to AUTO.
If the picture is distorted or colorless, select the color system ($NTSC_{3.58}$/PAL/SECAM/$NTSC_{4.43}$/PAL-M) according to the input signal.

GAMMA MODE

Select either position to obtain an optimum picture.

GRAPHICS: Improves the reproduction of half tones. Photos can be reproduced in natural tones.

TEXT: Contrasts black and white. Suitable for images with lots of text.

Input signals and adjustable/setting items

Item	Input signal					
	Video or S video	15k RGB	Component/ progressive component	RGB (preset)	RGB (preset) (HDTV, DTV)	RGB (not preset)
CONTRAST	Y	Y	Y	Y	Y	Y
BRIGHT	Y	Y	Y	Y	Y	Y
COLOR	Y	Y	Y	N	Y	N
HUE	Y (NTSC 3.58/ 4.43[1] only)	Y	Y	N	Y	N
SHARP	Y	Y	Y	N	Y	N
D. PICTURE	Y	N	Y	N	N	N
COLOR TEMP	Y	Y	Y	Y	Y	Y
COLOR SYS	Y	N	N	N	N	N
GAMMA MODE	N	N	N	Y	N	Y

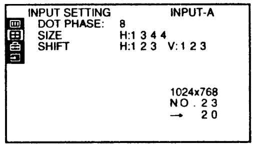
Y: Adjustable/can be set
N: Not adjustable/cannot be set

---

[1] $NTSC_{4.43}$ is the color system used when playing back a video recorded in NTSC color system on a $NTSC_{4.43}$ system VCR.

The INPUT SETTING Menu

The INPUT SETTING menu is used to change the settings of the input signal. Unadjustable items, which vary according to the input signal, are not displayed in the menu.



```
INPUT SETTING              INPUT-A
  DOT PHASE:   8
  SIZE         H:1 3 4 4
  SHIFT        H:1 2 3  V:1 2 3



                           1024x768
                           NO . 2 3
                           →    2 0
```

DOT PHASE

Adjusts the phase of the LCD panel and the input signal when H FILTER is set to OFF.
Adjust the value to obtain the clearest picture.

SIZE

Adjusts the horizontal size of the picture.
As the setting for H increases, the horizontal size of the picture becomes larger, and as the setting decreases, the size becomes smaller. Adjust the setting according to the input signal.
Use the ← or → key to adjust the horizontal size.

SHIFT

Adjusts the position of the picture.
H adjusts the horizontal position of the picture, and V adjusts the vertical position. As the setting for H increases, the picture moves to the right, and as the setting decreases, it moves to the left.
As the setting for V increases, the picture moves up, and as the setting decreases, it moves down.
Use the ← or → key to adjust the horizontal position and the ↑ or ↓ key for the vertical position.

SCAN CONV (converter)

Converts the signal to display the picture so that it fits the screen size.

ON: Displays the picture to fill the 4:3 screen. The picture will lose some clarity.

OFF: Displays the picture while matching one pixel of input picture element to that of the LCD. The picture will be clear but the picture size will be smaller.

Note

The function does not work for signals in Memory No. 32 and 33.

ASPECT

Sets the aspect ratio of the picture.
When inputting 16:9 (squeezed) signal from equipment such as a DVD player, set to 16:9.

4:3: When the picture with ratio 4:3 is input

16:9: When the picture with ratio 16:9 (squeezed) is input

H FILTER

Corrects the vertical bands that appear on the picture. The vertical bands may occur when an RGB signal with horizontal resolution of more than 1280 × 1024 pixels is input. In such cases, set to ON. The picture will loose some clarity, but the vertical bands will be reduced. Set to OFF to associate a dot of the input signal with a pixel of the LCD.

BLANKING

Adjusts if excess signals are seen with the picture, or the whole picture is not seen clearly.
Select BLANKING, then press the ENTER key to display the blanking adjustment screen.
Use the ↑ or ↓ key to select the part to be adjusted (TOP, BOTOM, RIGHT or LEFT), and the ← or → key to adjust.

The INPUT SETTING Menu

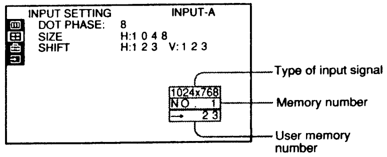
Input signals and adjustable/setting items

Item	Input signal				
	Video or S video	15k RGB	Component/ Progressive component	RGB (preset)	RGB (not preset)
DOT PHASE	N	N	N	Y (except for HDTV, DTV)	Y
SIZE	N	N	Y	Y	Y
SHIFT	Y	Y	Y	Y	Y
SCAN CONV	N	N	N	Y (Only for lower resolution than SXGA)	Y (Only for lower resolution than SXGA)
ASPECT	Y	Y	Y	N	N
H FILTER	N	N	N	Y (UXGA only)	Y (UXGA only)
BLANKING	Y (TOP and BOTTOM only)	Y (TOP and BOTTOM only)	Y (TOP and BOTTOM only)	Y (HDTV, DTV only)	Y

Y: Adjustable/can be set
N: Not adjustable/cannot be set

INPUT MEMORY No.

The upper number indicates the memory number of the current input signal. The lower number indicates the user memory number.



INPUT SETTING INPUT-A
DOT PHASE: 8
SIZE H:1 0 4 8
SHIFT H:1 2 3 V:1 2 3
1024x768
NO. 1
→ 2 3

About the memory function

The adjustment data for 48 types of input signals are preset at the factory (preset memory).
When a signal is input to the projector, the signal type is automatimally detected and the data for the signal is called from the memory to display an optimum picture.
The data can be adjusted in the INPUT SETTING menu and the adjusted data will be saved as user memory.
When you save more than 200 user memories, the newest one always overwrites the oldest one.
The saved user memory number is displayed in the INPUT SETTING menu as → NO. □□.
When an RGB signal other than the preset signals is input to the projector, the memory number is displayed as 0 and the closest option is automatically selected from the preset 48 types of signals.

Notes

- When an RGB signal is input with sync on Green including external sync, the picture tone may be greenish. In this case, disconnect the external sync signal.
- When an HDTV 1035/60i signal is input, the picture will appear smaller. Adjust SIZE, SHIFT and BLANKING referring to the following levels as a standard.

SIZE	H: 1479
SHIFT	H: 321
	V: 41
BLANKING	TOP: 167
	BOTTOM: 167
	RIGHT: 27
	LEFT: 27

- If SCAN CONV is set to ON when a signal in Memory No. 34–38 is input, the picture will appear widened. Adjust SIZE and SHIFT, referring to the following levels as a standard.

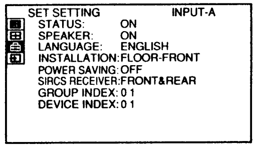
Memory No.		34	35	36	37	38
SIZE		1590	1575	1590	1582	1620
SHIFT	H	181	170	182	146	154
	V	18	32	36	36	42

Memory No.	Preset signal		fH (kHz)	fV (Hz)	Sync	Horizontal size
1	Video 60 Hz		15.73	59.94	—	—
2	Video 50 Hz		15.63	50.00	—	—
3	15k RGB (60 Hz)		15.73	59.94	S on G	—
4	15k RGB (50 Hz)		15.63	50.00	S on G	—
5	HDTV		33.75	60.00	S on Y/G	1543
6	640 x 350	VGA-1 (VGA350)	31.47	70.09	H-pos V-neg	800
7		VESA* 85(VGA350)	37.86	85.08	H-pos V-neg	832
8	640 x 400	NEC PC98	24.82	54.42	H-neg V-neg	848
9		VGA-2 (TEXT) /VESA70	31.47	70.09	H-neg V-pos	800
10		VESA 85 (VGA400)	37.86	85.08	H-neg V-pos	832
11	640 x 480	VGA VESA60	31.47	59.94	H-neg V-neg	800
12		Mac 13	35.00	66.67	S on G	864
13		VGA VESA 72	37.86	72.81	H-neg V-neg	832
14		VGA VESA 75 (IBM M3)	37.50	75.00	H-neg V-neg	840
15		VGA VESA 85 (IBM M4)	43.27	85.01	H-neg V-neg	832
16	800 x 600	SVGA VESA 56	35.16	56.25	H-pos V-pos	1024
17		SVGA VESA 60	37.88	60.32	H-pos V-pos	1056
18		SVGA VESA 72	48.08	72.19	H-pos V-pos	1040
19		SVGA VESA 75 (IBM M5)	46.88	75.00	H-pos V-pos	1056
20		SVGA VESA 85	53.67	85.06	H-pos V-pos	1048
21	832 x 624	Mac 16	49.72	74.55	H-neg V-neg	1152
22	1024 x 768	XGA VESA 43 (8514)	35.52	86.96	H-pos V-pos	1264
23		XGA VESA 60	48.36	60.00	H-neg V-neg	1344
24		XGA VESA 70	56.48	69.96	H-neg V-neg	1328
25		XGA VESA 75	60.02	75.03	H-pos V-pos	1312
26		XGA VESA 85	68.68	85.00	H-pos V-pos	1376
27	1152 x 864	VESA 70	64.00	70.02	H-pos V-pos	1472
28		VESA 75	67.50	75.00	H-pos V-pos	1600
29		VESA 85	77.49	85.06	H-pos V-pos	1568
30	1152 x 900	SUN LO	61.80	65.96	H-neg V-neg	1504
31		SUN HI	71.71	76.05	C-neg	1472
32	1280 x 960	VESA 60	60.00	60.00	H-pos V-pos	1800
33		VESA 75	75.00	75.00	H-pos V-pos	1728
34	1280 x 1024	SXGA VESA 43	46.43	86.87	H-pos V-pos	1696
35		SGI-5	53.32	50.06	H-neg V-neg	1680
36		SXGA VESA 60	63.97	60.01	S on G	1696
37		SXGA VESA 75	79.98	75.03	H-pos V-pos	1688
38		SXGA VESA 85	91.15	85.02	H-pos V-pos	1728
39	1600 x 1200	UXGA VESA 60	75.00	60.00	H-pos V-pos	1689
40		UXGA VESA 65	81.91	65.53	H-pos V-pos	1689
41		UXGA VESA 75	93.75	75.00	H-pos V-pos	1689
43	480/60p (Progressive component)		31.47	60.00	S on G	1605
44	575/50p (Progressive component)		31.25	50.00	S on G	1616
45	1080/50i		28.13	50.00	—	1852
47	720/60p		45.00	60.00	—	1736
48	720/50p		37.50	50.00	—	2084
49	1080/48i		27.00	48.00	—	1929

* VESA is a registered trademark of Video Electronics Standard Association.

The SET SETTING Menu

The SET SETTING menu is used for changing the initial settings of the projector. Unadjustable items are not displayed in the menu.



```
SET SETTING                 INPUT-A
  STATUS:          ON
  SPEAKER:         ON
  LANGUAGE:        ENGLISH
  INSTALLATION:FLOOR-FRONT
  POWER SAVING:OFF
  SIRCS RECEIVER:FRONT&REAR
  GROUP INDEX:0 1
  DEVICE INDEX:0 1
```

STATUS

Sets up the on-screen display.

ON: Shows all of the on-screen displays.

OFF: Turns off the on-screen displays except for the menus and warning messages.

SPEAKER

Set to OFF to cut off the sound of the internal speaker when external speakers are connected. When set to OFF, "SPEAKER OFF" appears on the screen when you turn on the power.

LANGUAGE

Selects the language used in the menu and on-screen displays.
Available languages are: English, French, German, Italian, Spanish, Japanese and Chinese.

INSTALLATION

Reverses the picture horizontally or vertically.

FLOOR-FRONT: The picture is not reversed.

CEILING-FRONT: The picture is reversed horizontally and vertically.

FLOOR-REAR: The picture is reversed horizontally.

CEILING-REAR: The picture is reversed vertically.

Note

In case of using a mirror, be careful of installation since the picture may be reversed.

POWER SAVING

When set to ON, the projector goes into the power saving mode and the lamp for light source turns off if no signal is input for about 10 minutes.
The power saving mode is canceled when a signal is input or any key is pressed.

SIRCS RECEIVER

Selects the remote control detectors to be activated. Change the setting if the wireless Remote Commander does not work properly due to the influence of the fluorescent lamp, etc.

FRONT & REAR: Activates both the front and rear detectors.

FRONT: Activates the front detector only.

REAR: Activates the rear detector only.

OFF: Activates neither the front nor rear detector.

Note

When set to OFF, the wireless Remote Commander does not function. Use the keys on the control panel or the wired Remote Commander.

GROUP INDEX

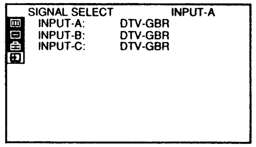
Groups multiple projectors or switchers to operate them simultaneously.
You can set the group index number to the desired number between 01 and 99.
For details for setting the group index, see pages 31 (GB) and 32 (GB).

DEVICE INDEX

Displays the index number set with the INDEX switches on the rear of the projector. You can check the device index number but cannot set it with this menu.
For details for setting the number, see page 31 (GB).

The SIGNAL SELECT Menu

The SIGNAL SELECT Menu is used for selecting the input signal.
Depending on the interface board installed in the projector, some items may not be displayed in the menu.



```
SIGNAL SELECT               INPUT-A
  INPUT-A:          DTV-GBR
  INPUT-B:          DTV-GBR
  INPUT-C:          DTV-GBR
```

Use the ⬆ or ⬇ key to select the input, then press the ENTER key.

INPUT-A

Selects audio and video signals input from the INPUT A connectors.

COMPUTER: Inputs the signal from a computer or the RGB signal for a still picture.

COMPONENT: Inputs the component signal.

DTV-YP$_B$P$_R$: Inputs the DTV (YP$_B$P$_R$) or HDTV (YP$_B$P$_R$) signal.

DTV-GBR: Inputs the DTV (GBR) or HDTV (GBR) signal.

Note

When the PC-3000 signal interface switcher is connected to the INPUT A connectors, you cannot select the item.

INPUT-B

Selects the input signal from the connectors on the optional IFB-12A interface board installed in the INPUT B section.

COMPUTER: Inputs the signal from a computer or the RGB signal for a still picture.

COMPONENT: Inputs the component signal.

DTV-YP$_B$P$_R$: Inputs the DTV (YP$_B$P$_R$) or HDTV (YP$_B$P$_R$) signal.

DTV-GBR: Inputs the DTV (GBR) or HDTV (GBR) signal.

VIDEO: Inputs the composite video signal.

S-VIDEO: Inputs the S video signal.

Note

This item is not displayed when the optional interface board other than the IFB-12A is installed in the INPUT B section, or when the output mode is selected on the IFB-12A.

INPUT-C

Selects the input signal from the connectors on the optional IFB-12A interface board installed in the INPUT C section.

COMPUTER: Inputs the signal from a computer or the RGB signal for a still picture.

COMPONENT: Inputs the component signal.

DTV-YP$_B$P$_R$: Inputs the DTV (YP$_B$P$_R$) or HDTV (YP$_B$P$_R$) signal.

DTV-GBR: Inputs the DTV (GBR) or HDTV (GBR) signal.

VIDEO: Inputs the composite video signal.

S-VIDEO: Inputs the S video signal.

Note

This item is not displayed when the optional interface board other than the IFB-12A is installed in the INPUT C section.

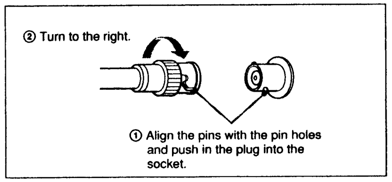
Connection Examples

For details on how to connect a computer, VCR or external active speakers, see page 17 (GB). Also refer to the instruction manual of the equipment to be connected.

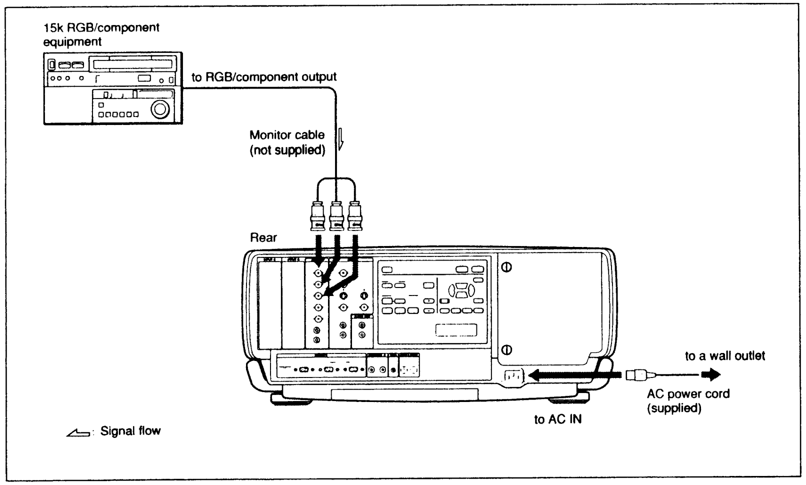
When making connections, be sure to:

- turn off all equipment before making any connections.
- use the proper cables for each connection.
- insert the plugs of the cables properly; plugs that are not fully inserted may generate noise. When pulling out a cable, be sure to pull it out from the plug, not the cable itself.

Connecting a BNC connector


② Turn to the right.
① Align the pins with the pin holes and push in the plug into the socket.

Connecting 15k RGB/Component Equipment


15k RGB/component equipment
to RGB/component output
Monitor cable (not supplied)
Rear
to a wall outlet
AC power cord (supplied)
to AC IN
: Signal flow

Note

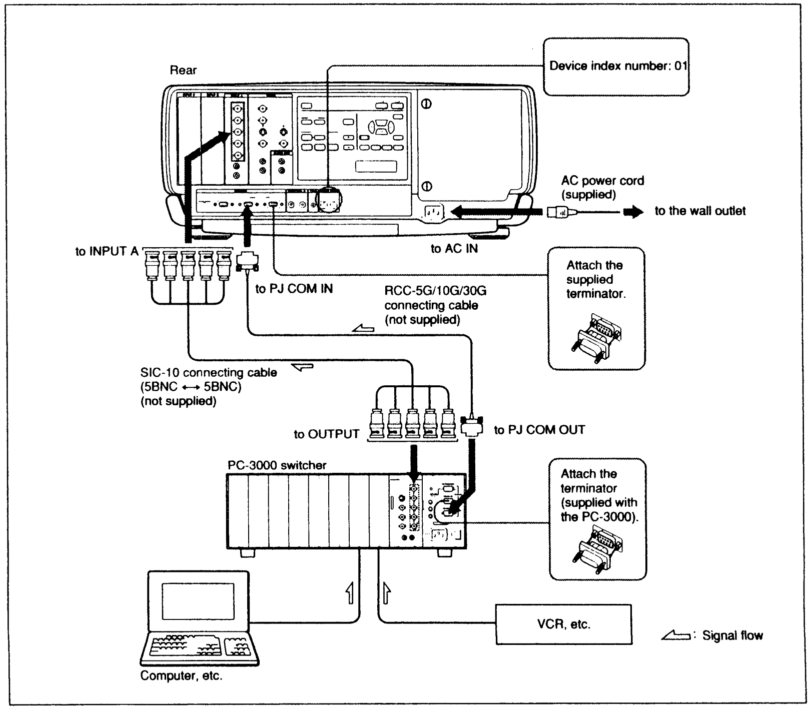
Switch the input signal with the INPUT-A item in the SIGNAL SELECT menu.
For details, see page 27 (GB).

Connecting the Switcher

Use the optional PC-3000 Signal Interface Switcher for connecting various video equipment. The input can be selected by pressing the SWITCHER/VIDEO MEMORY/INDEX keys on the Remote Commander.
For selecting the input from the switcher, see page 13 (GB).

Notes

- When you select the input from the switcher, be sure to set the SWITCHER/VIDEO MEMORY/INDEX select switch to the SWITCHER position.
- When connecting the switcher, use the wired Remote Commander. If you use the wireless Remote Commander, activate the remote control detector on only one unit of the equipment connected through the PJ COM connector. For the other equipment, set SIRCS RECEIVER in the SET SETTING menu to OFF to deactivate the remote control detectors.
  For details, see page 26 (GB).
- After all the connections are complete, attach the terminator (supplied) to the PJ COM connector on both the projector and switcher to which nothing is connected.


Rear
Device index number: 01
AC power cord (supplied)
to the wall outlet
to AC IN
to INPUT A
to PJ COM IN
RCC-5G/10G/30G connecting cable (not supplied)
Attach the supplied terminator.
SIC-10 connecting cable (5BNC ↔ 5BNC) (not supplied)
to OUTPUT
to PJ COM OUT
PC-3000 switcher
Attach the terminator (supplied with the PC-3000).
VCR, etc.
Computer, etc.
: Signal flow

Confirming the System Construction

After all the connections are complete, confirm that equipment of the system is properly setup.

1. Connect the AC cords of all equipment to the AC outlets.
2. Press the SYS SET key on the Remote Commander.
   You can also press the LIGHT and RESET keys simultaneously on the control panel for the same effect.
   Information on the system construction and the settings of the interface boards, etc. are automatically confirmed. Then the message disappears.

Note

When you want to use the projector without connecting the switcher after using the switcher in the system connections, it is necessary to confirm the system construction again by pressing the SYS SET key or the LIGHT and RESET keys after all the connections are complete. If you press the key(s), "Master Switcher not exist" appears, but the system construction is automatically recognized.

When a system error is detected

The following messages are displayed on the screen and display window:

Message	Remedy
Master Switcher not exist.	Set the switcher that outputs the signal to the projector to number 1.
Same DEVICE INDEX for Projector detected.	Change either number of the projectors that have the same number.
Same DEVICE INDEX for Switcher detected.	Change either number of the switchers that have the same number.

Note

If the switcher is in standby mode, the message appears only in the message display window.

Setting the Index Numbers

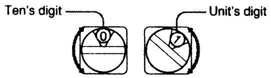
When you connect multiple projectors in your system, you have to set the group index and device index numbers for each projector.

To set the group index number

If you set the same group index number for multiple projectors, you can operate multiple projectors and switchers simultaneously (such as input selection) by designating the number.
The group index number can be set in the menu.
For group index number setting, see page 26 (GB).

To set the device index number

If you set the device index number, you can control each projector individually with the supplied Remote Commander.
The device index number can be set with the DEVICE INDEX switches on the rear of the projector. It is set to "01" at the factory.
If only one projector is connected, set it to "01."

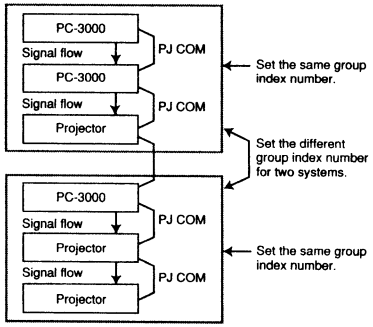


Notes

- Do not set the same device index number for the projectors in the same system.
- Do not set the number to "00." If you do, the projector will be operated only with the keys on the control panel. It cannot be controlled with the wired or wireless Remote Commander, or with an external equipment to which the PJ COM connectors are connected.

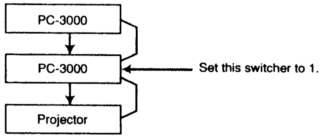
Notes on setting of the index number

- **Set the same group index number for all equipment of the same system connection (those on the signal route between the signal source and the projector).**


PC-3000
Signal flow
PJ COM
PC-3000
Signal flow
PJ COM
Projector
Set the same group index number.
Set the different group index number for two systems.
PC-3000
Signal flow
PJ COM
Projector
Signal flow
PJ COM
Projector
Set the same group index number.

For setting the group index number, see "GROUP INDEX" on page 26 (GB).

- **Set the correct group and device index numbers and the switcher number.**
  Do not set the same device index number or the same switcher number in one group.
  For example, if there are different pieces of equipment with the switcher number 1, the error message will appear when the SYS SET key is pressed.
- **Set the switcher that outputs the signal to the projector to number 1.**

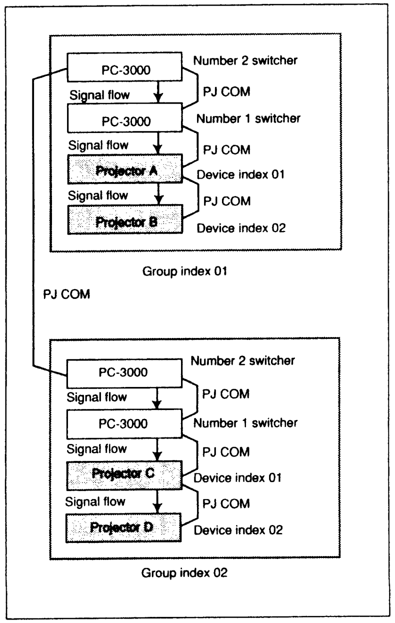


Notes on connections when two or more switchers are used

- **Mount the IFB-12A interface board to the slot 1 of the number n switcher and connect the output connector of the number (n+1) switcher to the IFB-12A.**
- **You can attach the IFB-12A signal interface board (when the IN/OUT switch is set to OUT) only to the number 1 switcher.**

To select the projector by designating the index numbers

When the switchers and projectors are connected as illustrated, select the desired projector by pressing the keys on the Remote Commander as shown below.


PC-3000
Number 2 switcher
Signal flow
PJ COM
PC-3000
Number 1 switcher
Signal flow
PJ COM
Projector A
Device index 01
Signal flow
PJ COM
Projector B
Device index 02
Group index 01
PJ COM
PC-3000
Number 2 switcher
Signal flow
PJ COM
PC-3000
Number 1 switcher
Signal flow
PJ COM
Projector C
Device index 01
Signal flow
PJ COM
Projector D
Device index 02
Group index 02

Example:

To select all the projectors
GROUP → ALL → ENTER → ALL → ENTER
Projectors A, B, C and D are selected.

To select projectors with device index 01 from all the groups
GROUP → ALL → ENTER → 1 → ENTER
Projectors A and C are selected.

To select a projector with device index 01 from group index 02
GROUP → 2 → ENTER → 1 → ENTER
Projector C is selected.

To select all the projectors from group index 02
GROUP → 2 → ENTER → ALL → ENTER
Projectors C and D are selected.

Notes

- Set the group index and device index numbers correctly. If more than two projectors are set to the same group index and device index numbers, an error message will be displayed when the SYS SET key is pressed.
- If the group index is a tens digit number, press the GROUP key before each press of the number key.

  Example:

  To select a projector with device index 13 of group index 12
  GROUP → 1 → GROUP → 2 → ENTER → 1 → 3 → ENTER

Maintenance

Replacing the Lamp

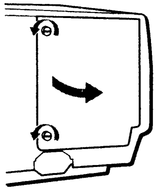
When the lamp has burnt out, the LAMP FAIL indicators at the rear of the projector light. In this case, replace the lamp with a new LMP-Q120 Projector Lamp (not supplied).

Note

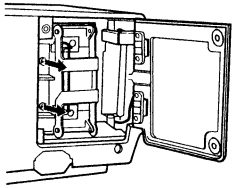
Immediately after turning off the power, the lamp is extremely hot. Wait at least one hour before changing the lamp to give it enough time to cool down.

To remove the lamp

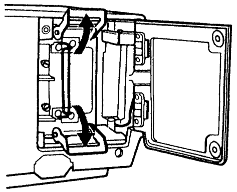
1. Press the STANDBY key to set the projector to standby mode, and unplug the power cord.
2. Remove the two screws with a coin or similar object, or a screwdriver, to open the lamp cover.



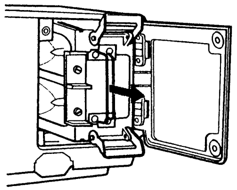
3. Loosen the two screws that fasten the lamp.



4. Fold out the levers up and down.

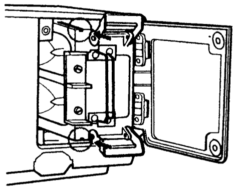


5. Pull out the lamp by holding the handles.

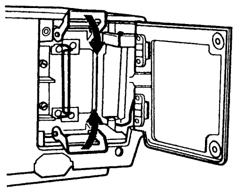


To install a new lamp

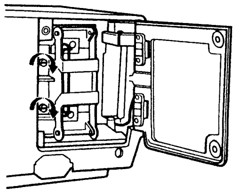
1. Mount the lamp with the grooves on the top and bottom aligned with the guides on the projector.



2. Push the lamp completely until it clicks. Fold down the levers to fix the lamp to the projector.

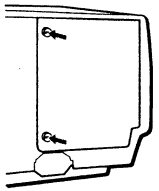


3. Tighten the two screws to secure the lamp.



(continued)

4 Replace the lamp cover and push to tighten the two screws to fix the cover.



To reset the use time of the lamps in the message display window

1 Plug in the power cord and set the projector to standby mode.

2 Press the LIGHT, ←, → and ENTER keys on the control panel in sequence. Press each key within 5 seconds.

```
TIMER RESET?
LAMP: 1
```

3 Press the ↑ or ↓ key to display ALL.

```
TIMER RESET?
LAMP: ALL
```

4 Press the ENTER key.

```
TIMER RESET??
LAMP: ALL
```

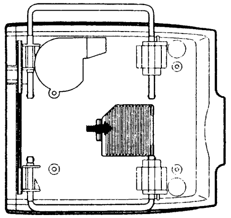
5 Press the ENTER key again to reset the time.
The reset mode will be automatically cancelled.

Cleaning the Air Filter

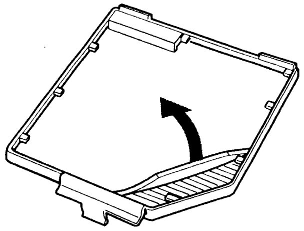
The air filter should be cleaned in every 100 hours. When it becomes difficult to remove the dust from the filter, replace the filter with a new one.

1 Turn off the power of the projector and unplug the power cord.

2 Remove the air filter cover on the bottom of the projector.



3 Remove the air filter.



4 Remove the dust from the filter with a vacuum cleaner.

5 Attach the air filter and replace the cover.

Notes
- If the air filter is excessively dirty, wash it with mild detergent solution and dry it in a shaded place.
- Be sure to attach the air filter cover firmly; the power will not be turned on if it is not closed securely.

Troubleshooting

If the projector appears to be operating erratically, try to diagnose and correct the problem, using the following guide. If the problem still persists, consult with qualified Sony personnel.

Symptom	Cause	Remedy
The power is not turned on.	The power has been turned off and on with the ON key at a short interval.	Wait for about one minute before turning on the power *(see page 8 (GB)).*
	The lamp cover is detached.	Attach the lamp cover securely.
	The air filter cover is detached.	Attach the air filter cover securely *(see page 34 (GB)).*
No picture and no sound.	Cable is disconnected.	Check that the proper connections have been made *(see pages 17 (GB), 28 (GB) and 29 (GB)).*
	Input selection is not correct.	Select the input source correctly in the SIGNAL SELECT menu *(see page 27 (GB)).*
No picture or no sound.	Either the picture or the sound is cut off.	Press the MUTING key to cancel the muting function *(see page 20 (GB)).*
The picture is noisy.	Noise may appear on the background depending on the combination of the numbers of dot input from the connector and numbers of pixel on the LCD panel.	Change the desktop pattern on the connected computer.
When inputting sound through the INPUT A/B/C connector, sound comes through one channel only.	Monaural sound is being input through the INPUT A/B/C connector.	Input stereo sound.
The picture from INPUT A/B/C connector is colored strange.	Setting for INPUT-A, INPUT-B or INPUT-C in the SIGNAL SELECT menu is incorrect.	Set INPUT-A, INPUT-B or INPUT-C in the SIGNAL SELECT menu correctly according to the input signal *(see page 27 (GB)).*
"Please check INPUT-A in SIGNAL SELECT" appears in spite of inputting the correct signal from INPUT A.	Setting for INPUT-A in the SIGNAL SELECT menu is incorrect.	Set INPUT-A in the SIGNAL SELECT menu correctly according to the input signal *(see page 27 (GB)).*
"Please check INPUT-B in SIGNAL SELECT" appears in spite of inputting the correct signal from INPUT B.	Setting for INPUT-B in the SIGNAL SELECT menu is incorrect.	Set INPUT-B in the SIGNAL SELECT menu correctly according to the input signal *(see page 27 (GB)).*
"Please check INPUT-C in SIGNAL SELECT" appears in spite of inputting the correct signal from INPUT C.	Setting for INPUT-C in the SIGNAL SELECT menu is incorrect.	Set INPUT-C in the SIGNAL SELECT menu correctly according to the input signal *(see page 27 (GB)).*
"NO INPUT" appears when 15k RGB or component signal is input.	The sync signal is incorrect.	Input the correct sync singal (composite sync or sync on G singal (sync on Y for component singal)).
On-screen displays do not appear.	STATUS in the SET SETTING menu is set to OFF.	Set STATUS in the SET SETTING menu to ON *(see page 26 (GB)).*
Color balance is not correct.	Picture has not been adjusted properly.	Adjust the picture *(see page 22 (GB)).*
	The color system of the input signal is not set correctly.	Set COLOR SYS in the PICTURE CTRL menu to match the color system of the input *signal (see page 22 (GB)).*
The picture is too dark.	The lamp is nearing the end of its life.	Replace the lamp with a new one *(see page 33 (GB)).*
	Contrast or brightness has not been adjusted properly.	Adjust CONTRAST or BRIGHT in the PICTURE CTRL menu properly *(see page 22 (GB)).*
The picture is not clear.	The picture is out of focus.	Adjust the focus *(see page 19 (GB)).*
	Moisture condensation has occurred on the lens.	Leave the projector for about two hours with the power on *(see page 15 (GB)).*

Troubleshooting

Symptom	Cause	Remedy
The Remote Commander does not work.	The batteries are exhausted.	Replace the batteries with new ones *(see page 14 (GB))*.
	The remote commander cable is connected to the Remote Commander although you are using it as a wireless Remote Commander.	Disconnect the remote control cable.
	The fluorescent lamp influences on the Remote Commander detector.	Change the setting of SIRCS RECEIVER in the SET SETTING menu *(see page 26 (GB))*.
	You have selected a wrong index number.	Select the correct index number *(see pages 26 (GB) and 31 (GB))*.
	You have set the index number to "00".	Select the correct index number *(see pages 26 (GB) and 31 (GB))*.
The wireless Remote Commander does not function.	The SIRCS RECEIVER setting is not correct.	Change the setting of SIRCS RECEIVER in the SET SETTING menu *(see page 26 (GB))*.
INPUT A cannot be selected.	The switcher is not connected, but is recognized to be connected.	If the PJ COM connector is connected to something other than the terminator, remove it then press the SYS SET key, or LIGHT and RESET keys on the control panel.
The COVER FAIL indicator lights.	The lamp cover or air filter cover is detached.	Attach the lamp cover or air filter cover securely *(see pages 33 (GB) and 34 (GB))*.
The LAMP FAIL indicator lights.	The lamp with the same number of the indicator has reached the end of its life.	Replace the lamp *(see page 33 (GB))*.
The FAN indicator lights.	The fan is broken.	Consult with qualified Sony personnel.
The HIGH TEMP indicator lights.	The internal temperature is unusually high.	Check to see if nothing is blocking the ventilation holes.
When you press the ZOOM, SHIFT or FOCUS key, "LENS CONTROL is locked! Do you wish to unlock ?" appears.	The lens control function is locked.	Consult with qualified Sony service personnel.

Caution messages

Use the list below to check the meaning of the messages displayed on the screen.

Message	Meaning	Remedy
High Temperature! Power off in 1 min.	Internal temperature becomes too high.	Turn off the power. (If not, the power is automatically turned off about one minute later.) Check to see if nothing is blocking the ventilation holes.
Frequency is out of range!	The frequency of the input signal is out of the acceptable range.	Input a signal that is within the range of the frequency.
Please check INPUT-A in SIGNAL SELECT.	You have input the RGB signal from the computer when INPUT-A in the SIGNAL SELECT menu is set to COMPONENT, DTV-GBR or DTV-YP$_B$P$_R$.	Set INPUT-A correctly.
Please check INPUT-B in SIGNAL SELECT.	You have input the RGB signal from the computer when INPUT-B in the SIGNAL SELECT menu is set to COMPONENT, VIDEO, S-VIDEO, DTV-GBR or DTV-YP$_B$P$_R$.	Set INPUT-B correctly.
Please check INPUT-C in SIGNAL SELECT.	You have input the RGB signal from the computer when INPUT-C in the SIGNAL SELECT menu is set to COMPONENT, VIDEO, S-VIDEO, DTV-GBR or DTV-YP$_B$P$_R$.	Set INPUT-C correctly.

Specifications

Optical characteristics

Projection system	3 LCD panels, 1 lens, 3-primary color optical shutter system
LCD panel	1.8-inch SXGA LCD panel, 3,932,160 pixels (1,310,720 pixels × 3)
Lens	Option
Light output	ANSI lumen[1] 3,500 lm
Lamp	120 W UHP × 4

Electrical characteristics

Color system	NTSC$_{3.58}$/PAL/SECAM/NTSC$_{4.43}$/PAL-M system, switched automatically
Resolution	600 horizontal TV lines (video input) 1280 × 1024 dots (RGB input)
Acceptable computer signal	fH: 15 to 100 kHz fV: 40 to 120 Hz
Speakers	Max. 5 W + 5 W, 90 × 50 mm (3 $^{5}/_{8}$ × 2 inches), stereo

Input/Output

CONTROL S	IN/PLUG IN POWER: Stereo minijack, 5 Vp-p, plug in power, DC 5 V, maximum output 60 mA OUT: Stereo minijack, 5 Vp-p
REMOTE RS-232C/422A	D-sub 9-pin (female) *(For details, see "Pin assignment" on page 39 (GB).)*
PJ COM	IN: D-sub 9-pin (male) OUT: D-sub 9-pin (female) *(For details, see "Pin assignment" on page 39 (GB).)*
TRIG	Minijack Power on: DC 12 V, output impedance: 4.7 kilohms Power off: 0 V
S VIDEO (priority to Y IN/C IN) (only for VPL-FE100U/FE100M)	IN: Mini DIN 4-pin type (male) Y (luminance): 1 Vp-p ± 2 dB sync negative, 75 ohms terminated C (chrominance): Burst 0.286 Vp-p ± 2 dB (NTSC), 75 ohms terminated Burst 0.3 Vp-p ± 2 dB (PAL), 75 ohms terminated OUT: Loop-through mini DIN 4-pin type (male) Loop-through output from the S VIDEO IN connector Y IN: BNC type 1 Vp-p ± 2 dB sync negative, 75 ohms terminated C IN: BNC type Burst 0.286 Vp-p ± 2 dB (NTSC), 75 ohms terminated Burst 0.3 Vp-p ± 2 dB (PAL), 75 ohms terminated
VIDEO (only for VPL-FE100U/FE100M)	IN: BNC type Composite video, 1 Vp-p ± 2 dB sync negative, 75 ohms terminated OUT: Loop-through BNC type Loop-through output from the VIDEO IN connector
AUDIO IN (only for VPL-FE100U/FE100M)	Phono type (stereo) 500 mVrms, impedance more than 47 kilohms
INPUT A	Analog RGB/component: BNC type R/R-Y: 0.7 Vp-p ± 2 dB positive, 75 ohms terminated G: 0.7 Vp-p ± 2 dB positive, 75 ohms terminated G with sync/Y: 1 Vp-p ± 2 dB sync negative, 75 ohms terminated B/B-Y: 0.7 Vp-p ± 2 dB positive, 75 ohms terminated SYNC/HD: Composite sync: 0.6–8 Vp-p, high impedance, sync positive/negative Horizontal sync: 0.6–8 Vp-p, high impedance, sync positive/negative

(continued)

---

[1] ANSI lumen is a measuring method of American National Standard IT 7.228.

Specifications

VD: Vertical sync: 0.6–8 Vp-p, high impedance, sync positive/negative
AUDIO IN: Phono type (stereo) 500 m Vrms, impedance more than 47 kilohms
HDTV/DTV (YPBPR): BNC type
Y: 1 Vp-p ± 2dB positive, 75 ohms terminated
Tri-level sync: ± 0.3 Vp-p
Bi-level sync: 0.3 Vp-p
PB/PR: 0.35 Vp-p ± 2dB positive, 75 ohms terminated
HDTV/DTV (GBR): BNC type
G with sync: 1 Vp-p ± 2 dB, 75 ohms terminated
Tri-level sync: ± 0.3 Vp-p
Bi-level sync: 0.3 Vp-p
B/R: 0.7 Vp-p ± 2dB positive, 75 ohms terminated
(For HDTV/DTV signals see "Acceptable HDTV/DTV signals" on page 39 (GB).)

AUDIO OUT (variable out)
Phono type, Max. 1 Vrms
When input is 500 mVrms: impedance less than 5 kilohms

Safety regulations
VPL-FE100U: UL1950, CSA No. 950 (c-UL), FCC Class A, IC Class A
VPL-FE100E/FE100M: EN60 950 (TÜV), CE, C-Tick

General

Dimensions	562 × 237 × 649 mm (22 1/4 × 9 3/8 × 25 5/8 inches) (w/h/d)
Mass	Approx. 34.5 kg (76 lb 1 oz) (excluding the optional lens)
Power requirements	VPL-FE100U: AC 100 to 120 V/ 220 to 240 V, 50/60 Hz[1] VPL-FE100E/FE100M: AC 220 to 240 V, 50/60 Hz
Power consumption	Approx. 770 W (Standby mode: 15W for VPL-FE100U, 20 W for VPL-FE100E/FE100M)
Heat dissipation	2628 BTU
Operating temperature	0°C to 40°C (32°F to 104°F)
Operating humidity	35% to 85% (no condensation)
Storage temperature	–20°C to +60°C (–4°F to +140°F)
Storage humidity	10% to 90%
Supplied Accessories	Remote Commander RM-PJ1001 (1) Size AA (R6) batteries (3) Remote commander cable (stereo) (15 m) (1) AC power cord (1) Terminator for the PJ COM connector (1) Lens ring (1) Operating Instructions (1) Installation Manual for Dealers (1) Warranty (only for VPL-FE100U) (1)

Design and specifications are subject to change without notice.

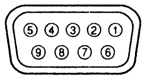
Optional accessories

Projector Lamp LMP-Q120 (for replacement)
Projector Lamp LMP-S120 (for replacement)
Interface Board
IFB-12A (Analog RGB/component/HDTV/composite video/S video input with 5BNC type connectors)
IFB-20 (Analog RGB input with D-sub 9-pin type connector)
IFB-21 (Analog RGB input/output with HD D-sub 15-pin type connector)
IFB-30 (Digital RGB input with D-sub 9-pin type connector)
IFB-50 (serial digital video input/output with BNC type connector)
IFB-1000 (Composite video input with BNC type connector/S video input with mini DIN 4-pin type connector)
IFB-X2000E (Composite video input with phono jacks/S video input with mini DIN 4-pin type connector) (only for VPL-FE100E)
Signal Interface Switcher PC-3000
Interface Unit IFU-1271/1271M
SIC Cable
SIC-10/20A/20C/21/22/23/24/24A/25/26/26A/30/31/M1/M5/M15/M25/M50
9-pin remote cable (for PJ COM)
RCC-5G/10G/30G
Monitor Cable
SMF-400 (HD D-sub 15-pin (female) ←→ 5BNC (female))
SMF-401 (HD D-sub 15-pin (female) ←→ HD D-sub 15-pin (female))
Signal Adapter
ADP-10 (D-sub 9-pin ←→ HD D-sub 15-pin (for SIC Cable))
ADP-20 (Macintosh ←→ VGA)
Remote Commander RM-PJ3000S
Remote Control Receiver RM-PJ10
Projection Lens
Fixed short focus lens VPLL-2009
Fixed short focus lens VPLL-2014
1.3-times zoom standard focus lens VPLL-Z3020
1.6-times zoom long focus lens VPLL-Z2025
1.5-times zoom long focus lens VPLL-Z2039
Fixed long focus lens VPLL-3050
Fixed long focus lens VPLL-2075
1.3-times zoom standard focus lens VPLL-Z2019
Projector Stand SU-PJ2000 (for stacking)
Projector Suspension Support PSS-2000
Screens
VPS-80FH (80-inch, flat)
VPS-100FH (100-inch, flat)
VPS-120FH (120-inch, flat)

Some of the items may not be available in some areas. For details, please consult your nearest Sony office.

Pin assignment

RS-232C/422A connector (D-sub 9-pin, female)



RS-232C

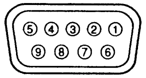
1	NC		6	DSR*	Data Set Ready
2	RD	Receive Data	7	RTS**	Request to Send
3	TD	Transmit Data	8	CTS**	Clear to Send
4	DTR*	Data Terminal Ready	9	NC	
5	GND	Ground			

* Circuit between pins 4 and 6 is short-circuited in the projector.
** Circuit between pins 7 and 8 is short-circuited in the projector.

RS-422A

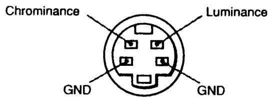
1	GND	Ground	6	GND	Ground
2	$\overline{TX}$	Transmit	7	TX	Transmit
3	RX	Receive	8	$\overline{RX}$	Receive
4	GND	Ground	9	GND	Ground
5	NC				

PJ COM connector (D-sub 9-pin, female)



1	GND	Ground	6	GND	Ground
2	$\overline{BUSY}$	Busy	7	BUSY	Busy
3	TX/RX	Tramsmit/ Receive	8	$\overline{TX/RX}$	Tramsmit/ Receive
4	GND	Ground	9	GND	Ground
5	NC				

S VIDEO connector (mini DIN 4-pin)



Acceptable HDTV/DTV formats

Format	Scanning rate (kHz)	Frame rate (Hz)*	Scanning format	Aspect ratio	Standard
1035/60i	33.75	30	2:1 interlace	16:9	BTA S-001B
1080/60i	33.75	30	2:1 interlace	16:9	SMPTE 274M/ BTA S-001B
480/60P	31.5	60	Progressive	16:9/4:3	SMPTE 293M
575/50P	31.25	50	Progressive	16:9/4:3	–
1080/48i	27	24	2:1 interlace	16:9	–
1080/50i	28.13	25	2:1 interlace	16:9	SMPTE 274M
720/60P	45	60	Progressive	16:9	SMPTE 293M
720/50P	37.5	60	Progressive	16:9	–

* Each of the frame rates is also compatible with 1/1.001.

---

[1] UL listed for 120 V operation.

Index

A

Adjusters 7 (GB)
Adjusting
  picture 22 (GB)
  picture size/shift 23 (GB)
  zoom 19 (GB)
Air filter 34 (GB)
ASPECT 23 (GB)
AUDIO MUTING 20 (GB)

B

Battery
  Installation 14 (GB)
  notes 14 (GB)
BLANKING 23 (GB)
BNC connector 28 (GB)
BRIGHT 22 (GB)

C

Carrying handles 7 (GB)
Caution messages 36 (GB)
COLOR 22 (GB)
COLOR SYS (System) 22 (GB)
COLOR TEMP 22 (GB)
Connections
  active speakers 17 (GB)
  BNC connector 28 (GB)
  computer 17 (GB)
  15k RGB/component equipment 28 (GB)
  Remote Commander 14 (GB)
  switcher 29 (GB)
  VCR 17 (GB)
CONTRAST 22 (GB)
Cut off
  the picture 20 (GB)
  the sound 20 (GB)

D, E

D. (Dynamic) PICTURE 22 (GB)
Device index 26 (GB), 31 (GB)
DOT PHASE 23 (GB)
DRC (Digital Reality Creation) 5 (GB)

F

fH (Horizontal frequency) 25 (GB)
FOCUS 19 (GB)
fV (Vertical frequency) 25 (GB)

G

GAMMA MODE 22 (GB)
Group index 26 (GB), 31 (GB)

H

Handle lever 7 (GB)
H FILTER 23 (GB)
HUE 22 (GB)

I, J, K

INPUT-A 27 (GB)
INPUT-B 27 (GB)
INPUT-C 27 (GB)
INPUT MEMORY No. 24 (GB)
INPUT SETTING menu 23 (GB)
Input signal selection 18 (GB)
Installation on a floor 16 (GB)

L

Lamp replacement 33 (GB)
LANGUAGE 26 (GB)
Location and function of controls
  control panel 8 (GB)
  front 6 (GB)
  rear 10 (GB)
  Remote Commander 12 (GB)

M, N

Menu
  Clearing the menu display 21 (GB)
  INPUT SETTING menu 23 (GB)
  PICTURE CTRL menu 22 (GB)
  SET SETTING menu 26 (GB)
  SIGNAL SELECT menu 27 (GB)
  Using the menu 21 (GB)
Moisture condensation 15 (GB)

O

On-screen display 26 (GB)
On-screen messages 36 (GB)
Optional accessories 38 (GB)

P, Q

PC-3000 Signal Interface Switcher 29 (GB)
PIC MUTING 20 (GB)
PICTURE CTRL menu 22 (GB)
PICTURE SHIFT 20 (GB)
Pin assignment 39 (GB)
PJ COM connector 29 (GB)
Power
  turn off 20 (GB)
  turn on 18 (GB)
POWER SAVING 26 (GB)
Precautions 4 (GB)
Precautions on installation 15 (GB)
Projecting 18 (GB)

R

Remote Commander
  battery installation 14 (GB)
  connecting to the projector 14 (GB)
  location and function of controls 12 (GB)
  notes 14 (GB)
Remote control (SIRCS) detector
  front 6 (GB)
  rear 9 (GB)
Reset
  resetting the item 21 (GB)
RS-232C/422A connector 11 (GB)

S

SCAN CONV 23 (GB)
SET SETTING menu 26 (GB)
SHARP 22 (GB)
SHIFT 23 (GB)
SIGNAL SELECT menu 27 (GB)
SIRCS RECEIVER 26 (GB)
SIZE 23 (GB)
SPEAKER 26 (GB)
Specifications 37 (GB)
STATUS 26 (GB)
Supplied accessories 38 (GB)

T, U, V, W, X, Y

Troubleshooting 35 (GB)

Z

ZOOM 19 (GB)

SONY

3-867-466-11(1)

LCD Data Projector

Installation Manual for Dealers GB

This Installation Manual for Dealers explains how to install the projector. For example, it explains how to attach the lens and connect external equipment.
For installation examples with projection distances, refer to the supplied "Projection Distance Charts."

Manuel d'installation destiné aux revendeurs FR

Ce manuel d'installation destiné aux revendeurs explique comment installer le projecteur. Par exemple, il explique comment monter l'objectif et raccorder l'équipement interne.
Pour les exemples d'installation mentionnant les distances de projection, reportez-vous aux "Tableaux des distances de projection" fournis.

Manual de instalación para proveedores ES

En este manual de instalación para proveedores se describe cómo instalar el proyector. Por ejemplo, se describe cómo fijar el objetivo y cómo conectar equipos externos.
Para obtener ejemplos de instalación con distancias de proyección, consulte "Tabla de distancias de proyección" suministradas.

VPL-FE100U
VPL-FE100E
VPL-FE100M

© 1999 by Sony Corporation

English

Table of Contents

Precautions .... 3 (GB)

Preparations

Location and Function of Controls .... 5 (GB)
  Front .... 5 (GB)
  Rear .... 9 (GB)
  Remote Commander .... 11 (GB)
Precautions on Installation .... 14 (GB)
Tips on the Screen .... 15 (GB)
Attaching the Lens .... 16 (GB)

Connections/Index number setting

Connection Examples .... 18 (GB)
  Connecting with a Computer, VCR or Active Speakers .... 18 (GB)
  Connecting 15k RGB/Component Equipment .... 19 (GB)
  Connecting the Switcher .... 20 (GB)
  Connecting Multiple Projectors .... 22 (GB)
  Confirming the System Construction .... 24 (GB)
Setting the Index Numbers .... 25 (GB)

Adjustments

Adjusting the Picture .... 27 (GB)
Using the Menu .... 28 (GB)
The PICTURE CTRL Menu .... 29 (GB)
The INPUT SETTING Menu .... 30 (GB)
The SET SETTING Menu .... 33 (GB)
The SIGNAL SELECT Menu .... 34 (GB)
The SERVICE MODE Menus .... 35 (GB)
  The INFORMATION Menu .... 36 (GB)
  The SERVICE SETTING Menu .... 37 (GB)
  The W/B ADJUST Menu .... 38 (GB)
  Restoring the USER MODE .... 38 (GB)

Others

Maintenance .... 39 (GB)
  Replacing the Lamp .... 39 (GB)
  Cleaning the Air Filter .... 41 (GB)
Troubleshooting .... 42 (GB)
Specifications .... 44 (GB)
Index .... 47 (GB)

Precautions

On safety

- Check that the operating voltage of your unit is identical with the voltage of your local power supply. If voltage adaptation is required, consult with qualified Sony personnel.
- Should any liquid or solid object fall into the cabinet, unplug the unit and have it checked by qualified Sony personnel before operating it further.
- Unplug the unit from the wall outlet if it is not to be used for several days.
- To disconnect the cord, pull it out by the plug. Never pull the cord itself.
- The wall outlet should be near the unit and easily accessible.
- The unit is not disconnected from the AC power source (mains) as long as it is connected to the wall outlet, even if the unit itself has been turned off.
- Do not look into the lens while the lamp is on.
- Do not place your hand or objects near the ventilation holes — the air coming out is hot.
- Carry and handle the projector by more than two people due to an incident of an injury.
- Avoid using an extension cord with a low voltage limited since it may cause the short-circuit and physical incidents.
- To carry the projector, be sure to use the carrying handle. Do not hold other parts of the projector, especially the lens, nor catch your finger between the handle, floor, and the projector.
- Do not catch your finger between the unit and surface of the floor when moving the projector installed on the floor.
- Be careful not to catch your finger in the cooling fan.
- Do not carry the projector by holding the cover of the cabinet.
- Do not carry the projector with the cabinet on and with its cover open.

On installation

- When the projector is mounted on the ceiling, the Sony PSS-2000 Projector Suspension Support must be used for installation.
- Allow adequate air circulation to prevent internal heat build-up. Do not place the unit on surfaces (rugs, blankets, etc.) or near materials (curtains, draperies) that may block the ventilation holes. Leave space of more than 30 cm (11 $^{7}/_{8}$ inches) between the wall and the projector. Be aware that room heat rises to the ceiling; check that the temperature near the installation location is not excessive.
- Install the projector on the floor or ceiling. Any other installation causes a mulfunction such as color irregularity or shortening lamp life.
- Do not install the unit in a location near heat sources such as radiators or air ducts, or in a place subject to direct sunlight, excessive dust or humidity, mechanical vibration or shock.
- To avoid moisture condensation, do not install the unit in a location where the temperature may rise rapidly.
- Do not install the projector on the low ceiling.
- Be sure to secure the cabinet cover firmly when installing to the ceiling firmly.

Precautions

On illumination

- To obtain the best picture, the front of the screen should not be exposed to direct lighting or sunlight.
- Ceiling-mounted spot lighting is recommended. Use a cover over fluorescent lamps to avoid lowering the contrast ratio.
- Cover any windows that face the screen with opaque draperies.
- It is desirable to install the projector in a room where floor and walls are not of light-reflecting material. If the floor and walls are of reflecting material, it is recommended that the carpet and wall paper be changed to a dark color.

On preventing internal heat build-up

After turning off the power, the cooling fan runs for about six minutes while the ON indicator flashes in green. The indicator flashes quickly for one minute. During that time, you will not be able to turn the power back on with the ON key.

Caution

The projector is equipped with ventilation holes (intake) at the bottom/ front side and ventilation holes (exhaust) at the left/right side.
Do not block or place anything near these holes, or internal heat build-up may occur, causing picture degradation or damage to the projector.

On cleaning

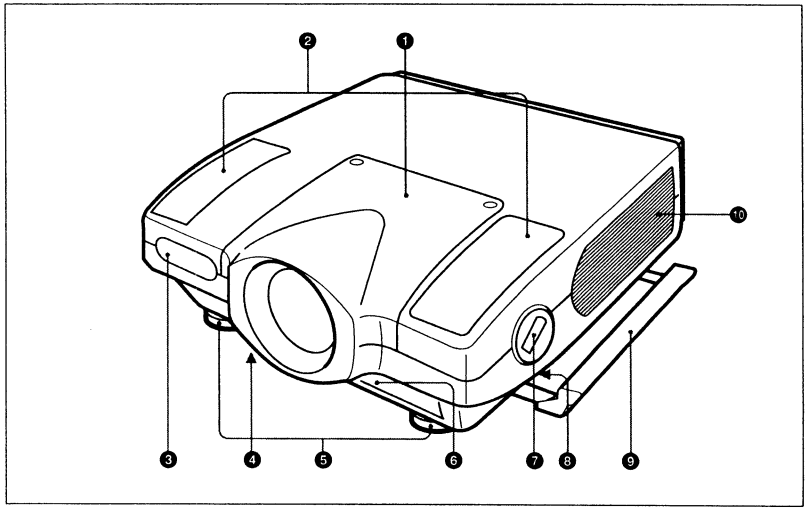
- To keep the cabinet looking new, periodically clean it with a soft cloth. Stubborn stains may be removed with a cloth lightly dampened with a mild detergent solution. Never use strong solvents, such as thinner, benzene, or abrasive cleansers, since these will damage the cabinet.
- Avoid touching the lens. To remove dust on the lens, use a soft dry cloth. Do not use a damp cloth, detergent solution, or thinner.
- Clean the air filter in every 100 hours.

On repacking

Save the original shipping carton and packing material; they will come in handy if you ever have to ship your unit. For maximum protection, repack your unit as it was originally packed at the factory.

Location and Function of Controls

Front



❶ Lens mount part
When attaching the optional lens, consult with the Sony service personnel.

❷ Speaker

❸ Front remote control (SIRCS) detector

❹ Bottom ventilation holes (intake)
Do not block the holes.

❺ Adjusters
Use the adjusters to keep the projector level if it is installed on an uneven surface.

❻ Front ventilation holes (intake)
Do not block the holes.

❼ Adjuster button and lever
Press the button to raise the lever for adjusting the height of the adjuster.

❽ Handle lever (left and right sides)
Use the lever for putting away the carrying handle.

❾ Carrying handle (left and right sides)
Pull out the handle for carrying the projector.

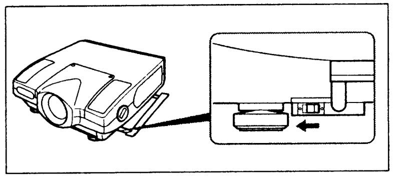
❿ Left and right side ventilation holes (exhaust)
Do not place anything within the 30 cm (11 7/8 inches) range from these holes or block them.

Notes

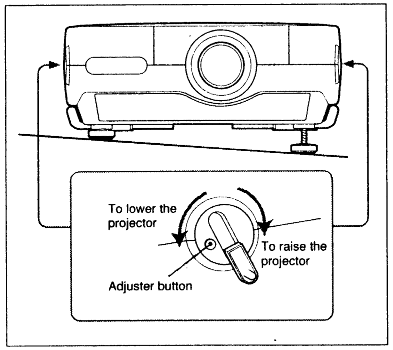
- Do not block the ventilation holes, or internal heat build-up may occur, causing fire or damage to the projector.
- Do not place anything near the ventilation holes or touch these holes as the temperature will be very high.

Using the carrying handles

Pull out to use for carrying the projector. To put away the handle, slide the handle lever forward.



Using the adjusters

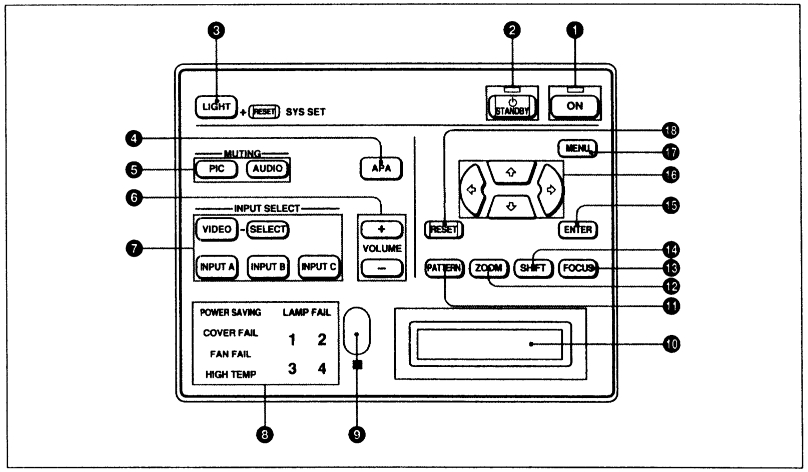

To lower the projector
To raise the projector
Adjuster button

1 Press the adjuster button.
The adjuster lever comes out.

2 Turn the lever to adjust the height so that the projector becomes level.

3 Replace the adjuster lever after use.

Control panel


❶
❷
❸
❹
❺
❻
❼
❽
❾
❿
⓫
⓬
⓭
⓮
⓯
⓰
⓱
⓲
LIGHT
+ RESET SYS SET
STANDBY
ON
MUTING
PIC
AUDIO
APA
INPUT SELECT
VIDEO
SELECT
INPUT A
INPUT B
INPUT C
+
VOLUME
–
MENU
RESET
ENTER
PATTERN
ZOOM
SHIFT
FOCUS
POWER SAVING
LAMP FAIL
COVER FAIL
FAN FAIL
HIGH TEMP
1
2
3
4

❶ ON key and indicator
Press to turn on the power of the projector.
The indicator lights when the key is pressed.
The indicator flashes for about six minutes after the power is turned off by pressing the STANDBY key, as the fan runs for six minutes to cool down the inside of the projector. The indicator flashes quickly for one minute, during which you will not be able to turn the power back on with the ON key.

❷ STANDBY key and indicator
Press to make the projector enter standby mode.
The indicator lights to indicate that the projector is in standby mode.

❸ LIGHT key
Illuminates the key indicators in orange when the projector is turned on. Illuminates the indicators for the relative keys in green when this key is pressed during operation. Press again to turn off the indicators.

Pressing this key and the RESET key simultaneously has the same function as the SYS SET key on the Remote Commander. Use when the PC-3000 signal interface switcher is used in the system or the system connections are changed.

❹ APA (Auto Pixel Alignment) key
Adjusts the position of the picture on the screen automatically so that the picture is clearly visible when the signals are input from a computer.

❺ MUTING keys
Cut off the picture or sound temporarily.
- **PIC:** Press to cut off the picture. Press again to restore the picture.
- **AUDIO:** Press to cut off the sound output from the speakers or the AUDIO OUT jacks. Press again or press the VOLUME + key to restore the sound.

❻ VOLUME +/– keys
Adjust the volume of the built-in speakers and output level of the AUDIO OUT jacks.
- + : Increases the volume.
- – : Decreases the volume.

(continued)

Location and Function of Controls

❼ INPUT SELECT keys

Select the input signal.

VIDEO: Selects the video signal input from the VIDEO or S VIDEO connectors and the audio signal input from the AUDIO IN L/R jacks. To switch the S VIDEO and VIDEO connectors, use the SELECT key.

SELECT: Each time you press this key, the input video signal is switched between the VIDEO and S VIDEO connectors.

INPUT A: Selects the audio and video signals input from the INPUT A connectors.

INPUT B: Selects the signal input from the connectors on the optional interface board which is installed in the INPUT B section. When the IFB-12A interface board is installed and the output mode is selected on the IFB-12A, the key does not function.

INPUT C: Selects the signal input from the connectors on the optional interface board which is installed in the INPUT C section.

Note on the VPL-FE100E

The optional IFB-X2000E interface board is required to select VIDEO.

❽ Indicators

POWER SAVING: Lights when the projector is in power saving mode. When POWER SAVING in the SET SETTING menu is set to ON, the projector goes into the power saving mode if no signal is input for 10 minutes. Although the lamp goes out, the cooling fan keeps running. In the power saving mode, only the STANDBY key functions for the first 30 seconds. The power saving mode is canceled when a signal is input or any key is pressed.

COVER FAIL: Lights when the lamp cover or air filter cover is not secured firmly.

FAN FAIL: Lights when the fan is broken.

HIGH TEMP: Lights when temperature inside the projector becomes unusually high.

LAMP FAIL: When the lamp life has reached the end, the indicator of that lamp lights.

❾ Rear remote control (SIRCS) detector

❿ Message display window

Displays the signal status, timer and error messages about the input signals.

⓫ PATTERN key

Displays a HATCH pattern on the screen for focus, zoom, and shift adjustments. Press again to turn off the HATCH pattern.

⓬ ZOOM key

Enters the zoom adjustment mode. When the key is pressed, the relative keys light in green.

Next adjust the zoom using the arrow keys.

↑: Enlarges the picture size.

↓: Reduces the picture size.

Note

If the VPLL-2075, VPLL-2014, VPLL-2009 or VPLL-3050 optional lens is installed, you cannot adjust the zoom.

⓭ FOCUS key

Enters the focus adjustment mode. When the key is pressed, the relative keys light in green.

Next adjust the focus using the arrow keys.

↑: Focuses on a forward picture.

↓: Focuses on a picture further back.

⓮ SHIFT (lens shift) key

Enters the shift adjustment mode. When the key is pressed, the relative keys light in green.

Next adjust the vertical position of the picture using the arrow keys.

↑: Moves the picture upward.

↓: Moves the picture downward.

⓯ ENTER key

Stores the settings in the menu.

⓰ Arrow keys (↑/↓/←/→)

Used to adjust the picture after pressing the ZOOM, FOCUS or SHIFT key. Also used to move the cursor or adjust the value in the menu.

⓱ MENU key

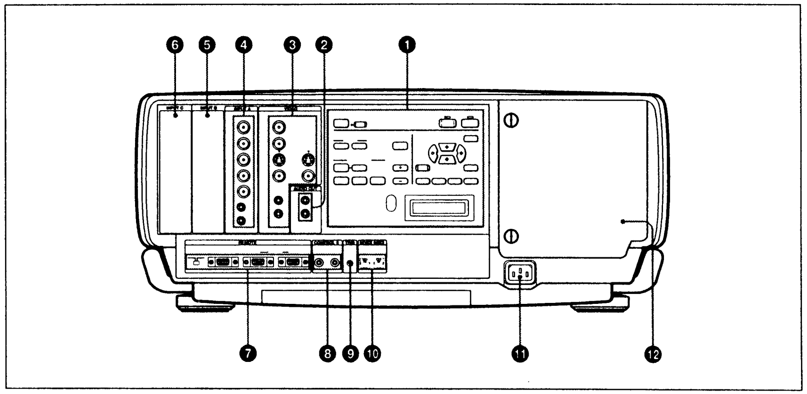
Displays the menu on the screen. When the key is pressed, the relative keys light in green.

Press again to turn off the menu.

⓲ RESET key

Resets the adjusted value of an item to its factory preset value. This key functions when the menu or a setting item is displayed on the screen.

Rear



❶ Control panel

For details, see pages 7 (GB) and 8 (GB).

❷ AUDIO OUT L/R jacks (phono type)

Connect to external active speakers.

The volume of the speakers can be controlled by the VOLUME keys on the Remote Commander or the control panel.

❸ VIDEO connectors

Connect to external video equipment, such as a VCR.

Y IN/C IN (BNC type): Connect to the Y and C video outputs of the video equipment.

S VIDEO IN (mini DIN 4-pin): Connects to the Y/C video output of the video equipment.

S VIDEO OUT (mini DIN 4-pin): Used as loop-through output via the Y/C IN connectors or the S VIDEO IN connector.

VIDEO IN (BNC type): Connects to the composite video output connector of the video equipment.

VIDEO OUT (BNC type): Used as loop-through output of the VIDEO IN connector.

AUDIO IN L (MONO)/R jacks (phono type): Connect to the audio output jacks of equipment, such as a VCR. For stereo equipment, use both the L and R jacks; for monaural equipment, use the L (MONO) jack only.

Note

If you have video equipment connected to both the Y/C IN and S VIDEO IN connectors, the signal from the Y/C IN connectors are selected prior to the S VIDEO IN connector. When projecting video connected to the S VIDEO IN connector, be sure not to connect any cable to the Y/C IN connectors.

Note on the VPL-FE100E model

The optional IFB-X2000E interface board is required for using the VIDEO connectors.

❹ INPUT A connectors

RGB input connectors (R/R-Y/P_R, G/Y, B/B-Y/P_B, SYNC/HD, VD) (BNC type): Connect to the video outputs of equipment such as a computer or a video camera.

According to the connected equipment, the RGB or component (R-Y, Y, B-Y), HDTV (YP_BP_R or GBR) or DTV (YP_BP_R or GBR) signal is selected.

AUDIO IN L (MONO)/R jacks (phono type): Connect to the audio output jacks of equipment such as a computer or a video camera. For stereo equipment, use both the L and R jacks; for monaural equipment, use the L (MONO) jack only.

Note

The INPUT A connectors do not function when the PC-3000 signal interface switcher is connected.

(continued)

⑤ Signal interface board attachment part (INPUT B)

Optional signal interface board can be attached according to your requirements. If you install the IFB-12A interface board to this section and select the output mode, you can output the signal input through the INPUT A connectors.

For details on installing the interface boards, consult with qualified Sony personnel.

⑥ Signal interface board attachment part (INPUT C)

Optional signal interface board can be attached according to your requirements.

Note

You cannot select the output mode when attaching the IFB-12A interface board.

⑦ REMOTE connectors

Used to expand system capability.

- **RS-232C/RS-422A select switch:** Selects according to the interface connected to the RS-232C/RS-422A connector.
- **RS-232C/RS-422A connector (D-sub 9-pin, female):** Connect to a computer to operate the projector from the computer.
- **PJ COM IN/OUT connectors (D-sub 9-pin, female):** The connectors conform to the RS-485 standards and are used to expand system capability for Sony projectors.

For details on connections, see the PJ COM protocol manual for Sony projectors.

⑧ CONTROL S IN/OUT jacks (stereo minijack)

Connect to the control S jacks of other Sony equipment.

- **CONTROL S IN/PLUG IN POWER (DC 5 V output) jack:** Connects to the CONTROL S OUT jack of the supplied Remote Commander when using as a wired Remote Commander. In this case, you do not need to install the batteries in the Remote Commander, since the power is supplied from this jack.
- **CONTROL S OUT jack:** Outputs the control S signal.

Note

When connecting the remote commander cable to the CONTROL S IN jack, the remote control detectors will not function.

⑨ TRIG (trigger output) jack (monaural minijack)

The signal is transmitted from this jack to the connected equipment whether the projector is on or off. (This is not a power source for external equipment.) When the power is on, the TRIG jack transmits approximately 12 V trigger signal to external equipment connected to the projector. This signal is useful when you connect a system integrator, etc., to the projector; you can pull down an electric screen, draw an electric curtain, or dim lights at the same time as you turn on the projector power. (You cannot use the trigger signal as a power source.)
This jack outputs 0 V DC when the power is off.

⑩ DEVICE INDEX switch

Set the device index number of the projector when using multiple projectors. You can set the numbers between "01" and "99". It is set to "01" at the factory. You can also set the group index number in the menu for system setup.

Note

Do not set the device index number to "00". If you do, the projector will be operated only with the keys on the control panel.

⑪ AC IN socket

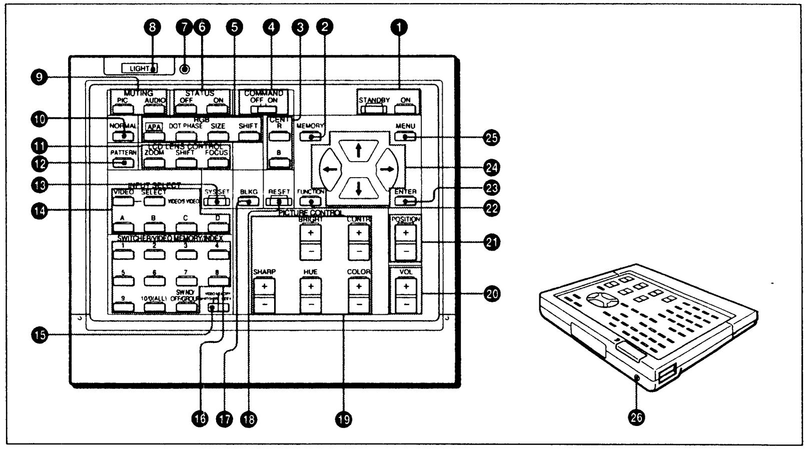
Connect the supplied AC Power cord.

⑫ Lamp cover

Remote Commander

The Remote Commander can be used as a wireless or wired Remote Commander. The keys on the Remote Commander with the same names function the same as those on the control panel of the projector.

For details on control panel keys on the projector, see pages 7 (GB) and 8 (GB).



① ON/STANDBY keys

② MEMORY key

The key does not function with this projector.

③ CENT R/B keys

The keys do not function with this projector.

④ COMMAND ON/OFF key

No keys except for the LIGHT button on the Remote Commander function when this switch is set to OFF. This saves battery power.

⑤ RGB keys

Adjust the picture.

- **APA:** The key functions the same as the APA key on the control panel.
- **DOT PHASE:** Press to adjust the phase of the LCD panels and the input signals (except for 15k RGB/video/HDTV/DTV signals). After pressing this key, adjust the position of the picture using the four arrow keys so that the clearest picture is obtained.
- **SIZE:** Enters the size adjustment mode for the input signal. Next adjust the horizontal size of the picture using the arrow keys.
  ←: to reduce horizontal size
  →: to expand horizontal size
- **SHIFT:** Enters the shift adjustment mode for the input signal. Next adjust the position of the picture using the four arrow keys. The picture shifts in the direction of the arrow on the pressed key.

⑥ STATUS ON/OFF keys

Press OFF to eliminate the on-screen display.
Press ON to restore the on-screen display.

Note

The menus and warning messages appear even if the OFF key is pressed.

⑦ Transmission indicator

The light goes on each time a key is pressed. If the indicator does not light, replace the batteries.

(continued)

⑧ LIGHT button
Illuminates the key indicators when the COMMAND switch is set to ON. If the switch is set to OFF, only the COMMAND switch is illuminated.
If you do not press any key on the Commander for more than 30 seconds, the key indicators turn off automatically. The indicators also turn off if you press the LIGHT button again.

⑨ MUTING keys

⑩ NORMAL key
The key does not function with this projector.

⑪ LCD LENS CONTROL keys
Press one of the ZOOM, SHIFT and FOCUS keys and then the arrow keys (↑ or ↓).

⑫ PATTERN key

⑬ SYS SET (system set) key
When the PC-3000 signal interface switcher is used in the system or the system connections are changed, press this key.

Note

After connecting the PC-3000 switcher and pressing the SYS SET key, the input channel is set to SW1-1 when connecting a single switcher, or to SW1-2 when connecting two or more switchers.

⑭ INPUT SELECT keys
The D key does not function with this projector.

⑮ SWITCHER/VIDEO MEMORY/INDEX select switch
Selects the function of the SWITCHER/VIDEO MEMORY/INDEX keys.

SWITCHER: selects the input from the PC-3000 switcher.

VIDEO MEMORY: The position does not function with this projector.

INDEX: selects a projector by its index number when multiple projectors are used.

⑯ SWITCHER/VIDEO MEMORY/INDEX keys

When **the SWITCHER/VIDEO MEMORY/ INDEX select switch** is set to **SWITCHER**

When the PC-3000 switcher is connected to the projector, press a number key (1 to 8) to select the input from the switcher. Number key 9 does not function.

To select an input when multiple switchers are connected, press the SW NO/OFF/GROUP key. Next press the switcher number (1 to 8) and the input number (1 to 8) in sequence. Be sure to press the keys one after another within 2 seconds.
e.g. To select input 4 of switcher 2, press the keys as follows: SW NO → 2 → 4.

When **the SWITCHER/VIDEO MEMORY/ INDEX select switch** is set to **INDEX**

Used to specify the device or group index number.

⑰ BLKG (blanking) adjustment key
Enters the blanking adjustment mode.
Next, press the ↑/↓ key to select the position to be adjusted on the screen, and then adjust the position using the ←/→ keys.

⑱ RESET key

⑲ PICTURE CONTROL +/– keys
Adjust the picture conditions: CONTR (contrast), BRIGHT (brightness), COLOR, HUE and SHARP (sharpness).

⑳ VOL (volume) +/– keys

㉑ POSITION +/– keys
These keys do not function with this projector.

㉒ FUNCTION key
The key does not function with this projector.

㉓ ENTER key

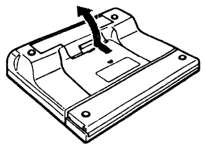
㉔ Arrow keys

㉕ MENU key

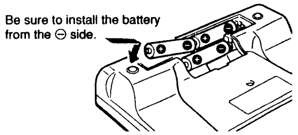
㉖ CONTROL S OUT jack
Connect the supplied remote control cable to this jack and to the CONTROL S IN jack of the projector for wired remote control operation.
When the Commander is connected to the CONTROL S IN/PLUG IN POWER jack of the projector via the remote control cable (stereo), the power for the Remote Commander is supplied from the projector.

Battery installation

1 Push to open the lid.



2 Install three R6 (size AA) batteries (supplied) with the polarities correctly aligned.



3 Replace the lid.

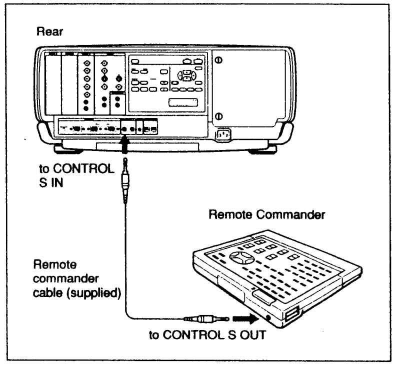
Notes on batteries

- Make sure that the battery orientation is correct when inserting batteries.
- Do not mix old battery with new one, or different types of batteries.
- If you will not use the Remote Commander for a long time, remove the batteries to avoid damage from battery leakage. If batteries have leaked, remove them, wipe the battery compartment dry and replace the batteries with new ones.

Notes on wireless Remote Commander operation

- Be sure that there is nothing to obstruct the infrared beam between the Remote Commander and the projector.
- The operation range is limited. The shorter the distance between the Remote Commander and the projector, the wider the angle within which the commander can control the projector.
- The remote control detectors on the projector do not operate when connecting the remote commander cable to the CONTROL S IN jack. If you wish to use the Remote Commander as a wireless Remote Commander, be sure to remove the remote commander cable from both the Remote Commander and the projector.

To connect the Remote Commander to the projector



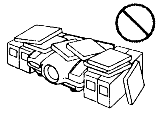
Note on wired Remote Commander operation using the supplied remote commander cable (stereo)

You do not need to install the batteries since the power is supplied from the CONTROL S IN jack on the projector. In this case, the batteries are not consumed.

Precautions on Installation

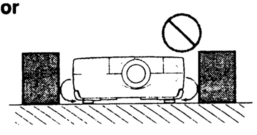
For installation examples with projection distances, see the supplied "Projection Distance Charts."
Do not install the projector in the following situations. These installations may cause malfunction or damage to the projector.

Do not install the projector in an ill-ventilated place



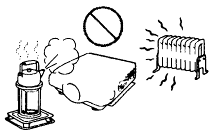
The projector is equipped with ventilation holes for intake on the bottom and front and ventilation holes for exhaust on the left and right sides to prevent internal heat build-up. Do not block these ventilation holes and allow adequate air circulation at an installation location.

Do not place any object beside the projector

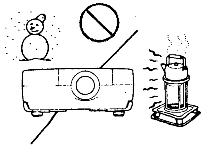


If you put something beside the ventilation holes on the sides, the exhaust may be inhaled into the projector through the ventilation holes (intake) at the bottom, causing the internal temperature to rise and thereby activating the protection circuit. Install the projector so that the exhaust is not blocked.

Do not install the projector in a location where temperature or humidity is very high

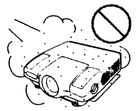


Avoid installing the projector in a location where temperature may rise or fall rapidly

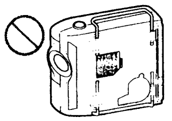


Be careful of air-conditioning and heating in a room where the projector is installed, as sudden changes in temperature may lead to moisture condensation and cause damage to the projector.

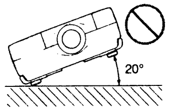
Avoid installing the projector in a location subject to excessive dust



Do not use the projector while laying it on its side

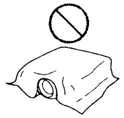


Do not tilt the projector when in use



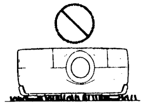
Avoid tilting the projector more than 20 degrees or installing it other than on the floor and ceiling. Such installations may cause malfunctions such as color irregularity or shortening of lamp life.

Do not cover the ventilation holes (exhaust)



Do not cover the front ventilation holes; otherwise, internal heat may build up.

Do not install the projector on a deep-pile carpet



If you install the projector on a deep-pile carpet, the ventilation holes (intake) at the bottom may be blocked, causing an internal heat build-up.

Tips on the Screen

Screen size

The screen size is the diagonal length of the screen in inches, while the aspect ratio of the screen is 3:4. The ratio of the screen height, width, and diagonal is 3:4:5. If you use a screen with 3:4 aspect ratio whose size is not given in the table below, you can calculate the screen height and width from the screen size (inches) as follows.
Calculate at the conversion rate of 25.4 mm to the inch.

Height (mm) = Screen size × 25.4 × $^3/_5$
Width (mm) = Screen size × 25.4 × $^4/_5$

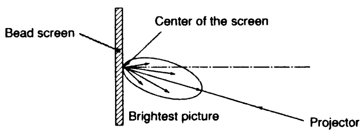
Screen size and dimensions

Screen sizes (Inches) (Diagonal)	Height (mm)	Width (mm)
60	914	1219
80	1219	1626
100	1524	2032
120	1829	2438
150	2286	3048
180	2743	3658
200	3048	4064
250	3810	5080
300	4572	6096

Types of screen

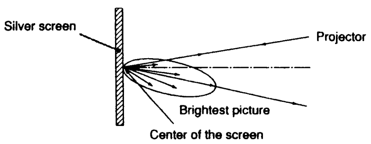
Front projection screen for floor installation

The bead screen is recommended. A screen of this type reflects the brightest light.



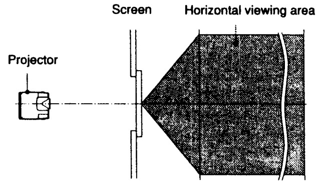
Front projection screen for ceiling installation

The silver screen is recommended. You can get a picture that is two to four times brighter than that of the white screen.



Rear projection screen

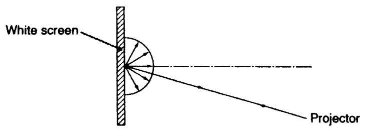
The rear projection screen is recommended for a bright and clear full-screen picture projection since the sunlight has little effect on the screen.



Notes
- A moiré pattern may occur in accordance with the pitch of the screen.
- Be sure to confirm the picture quality before installation.

White screen

When viewers watch the projected picture in a wide area, you can obtain a picture that appears equally bright from all parts of the room using the white screen for both floor and ceiling installations.



Attaching the Lens

Attach one of the following types of optional lenses to the projector according to your purpose.

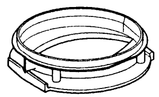
- VPLL-2009 fixed short focus lens
- VPLL-2014 fixed short focus lens
- VPLL-Z3020 1.3-times zoom standard focus lens
- VPLL-Z2025 1.6-times zoom long focus lens
- VPLL-Z2039 1.5-times zoom long focus lens
- VPLL-3050 fixed long focus lens
- VPLL-2075 fixed long focus lens
- VPLL-Z2019 1.3-times zoom standard focus lens

To attach the lens, follow the steps below.

Before attaching the lens

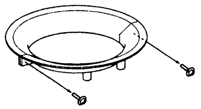
The lens ring used for the lens and the attaching method vary depending on the types of lenses. Check your lens type by referring below.

Unit type lens ring (supplied with the projector)



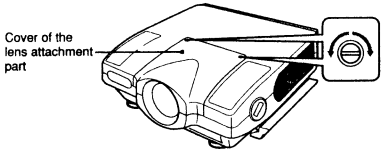
The unit type lens ring is used for the VPLL-Z2025, VPLL-Z2039, VPLL-2075 and VPLL-3050.

Assembly type lens ring (attached to the projector)

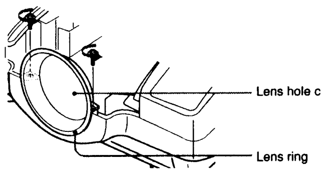


The assembly type lens ring is used for the VPLL-2014, VPLL-2009 and VPLL-Z2019. For the VPLL-2014 and VPLL-2009, disassemble the ring by removing the screws before attaching.
For VPLL-Z2019 and VPLL-Z3020, attach the lens ring without disassembling.

1 Turn the screws on the lens attachment part either clockwise or counterclockwise by 90 degrees with a screwdriver, then remove the cover from the lens attachment part.

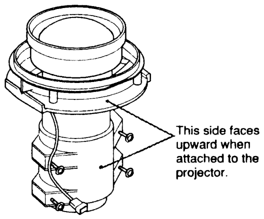

Cover of the lens attachment part

2 Remove the lens ring and the lens hole cover.

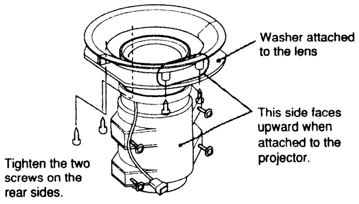

Lens hole cover
Lens ring

3 Attach the lens ring to the lens.

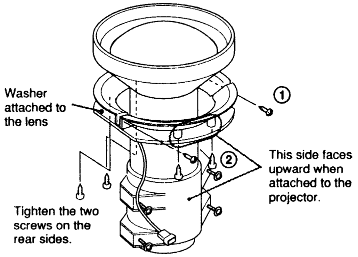
For VPLL-Z2025, VPLL-Z2039, VPLL-2075 and VPLL-3050
When using the VPLL-3050, remove the washer by removing the four screws.


This side faces upward when attached to the projector.

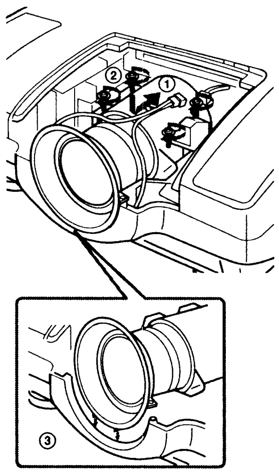
For VPLL-Z2019 and VPLL-Z3020
Attach the lens washer to the lens ring with the four screws.


Washer attached to the lens
This side faces upward when attached to the projector.
Tighten the two screws on the rear sides.

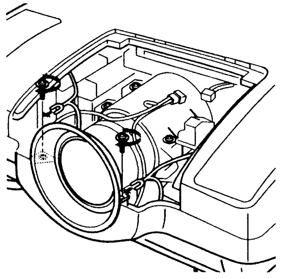
For VPLL-2014 and VPLL-2009
① Disassemble the lens ring and attach it to the lens.
② Attach the lens washer to the lens ring with the four screws.


Washer attached to the lens
①
②
This side faces upward when attached to the projector.
Tighten the two screws on the rear sides.

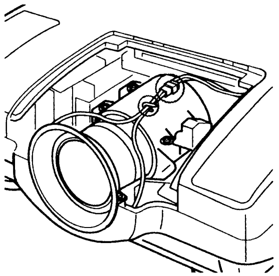
4 Mount the lens onto the projector.
① Install the lens onto the projector, and push the lens until it touches the stopper.
② Secure the lens by tightening the four screws.
③ Fit the projections on the lens ring to the groove on the projector.



5 Tighten two screws, with the cords put on the ring, to secure the ring and cords.



6 Attach the connector from the lens to the projector and fix it with the cable harness.



7 Replace the cover for the lens attachment part and tighten the screws.

Notes
- When attaching the lens, be careful not to overtighten the screws.
- The lens scratches easily, so when handling it, always place it gently on a stable and level surface in a horizontal position.
- Avoid touching the lens surface.

Connection Examples

Also refer to the instruction manual of the equipment to be connected.

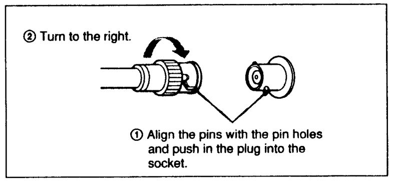
When making connections, be sure to:

- turn off all equipment before making any connections.
- use the proper cables for each connection.
- insert the plugs of the cables properly; plugs that are not fully inserted may generate noise. When pulling out a cable, be sure to pull it out from the plug, not the cable itself.

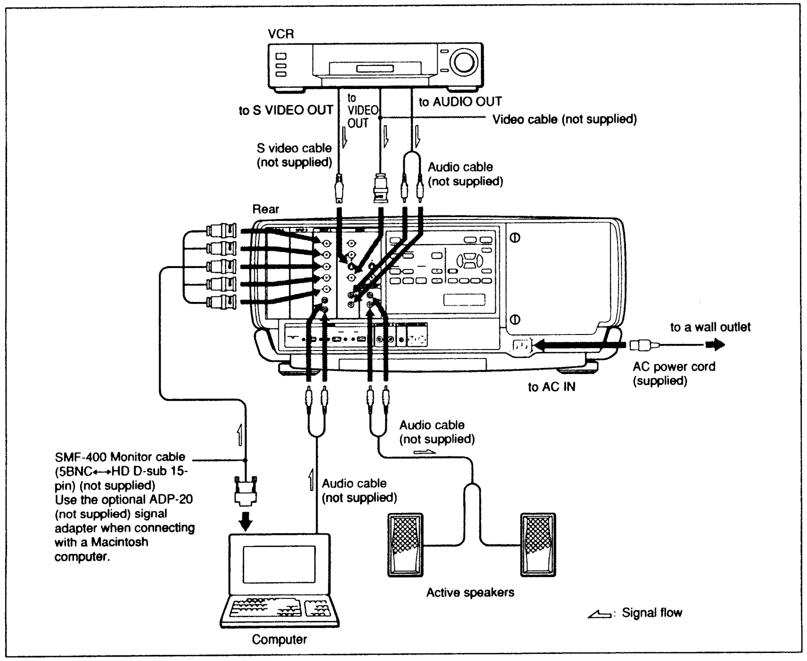
Note on the VPL-FE100E model

The optional IFB-X2000E interface board is required for using the VIDEO connectors.

Connecting a BNC connector


② Turn to the right.
① Align the pins with the pin holes and push in the plug into the socket.

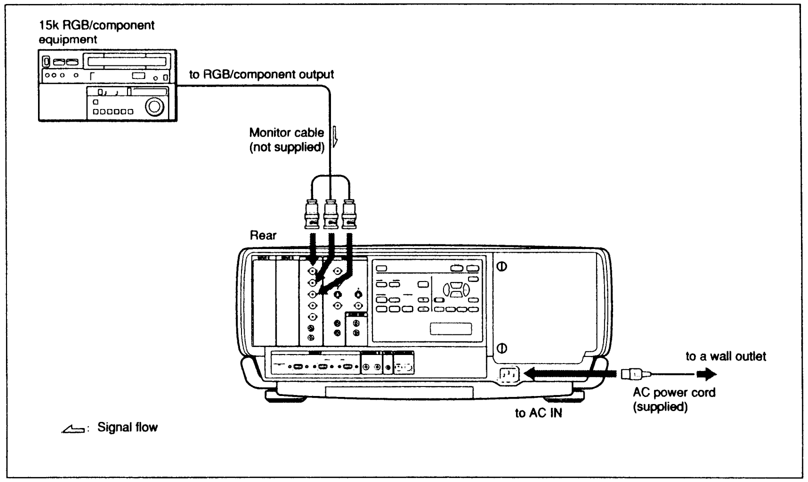
Connecting with a Computer, VCR or Active Speakers


VCR
to S VIDEO OUT
to VIDEO OUT
to AUDIO OUT
Video cable (not supplied)
S video cable (not supplied)
Audio cable (not supplied)
Rear
to a wall outlet
AC power cord (supplied)
to AC IN
Audio cable (not supplied)
SMF-400 Monitor cable (5BNC↔HD D-sub 15-pin) (not supplied)
Use the optional ADP-20 (not supplied) signal adapter when connecting with a Macintosh computer.
Audio cable (not supplied)
Active speakers
Computer
: Signal flow

Note

Set INPUT-A in the SIGNAL SELECT menu to COMPUTER.
For details, see page 34 (GB).

Connecting 15k RGB/Component Equipment


15k RGB/component equipment
to RGB/component output
Monitor cable (not supplied)
Rear
to a wall outlet
AC power cord (supplied)
to AC IN
: Signal flow

Note

Switch the input signal with the INPUT-A item in the SIGNAL SELECT menu.
For details, see page 34 (GB).

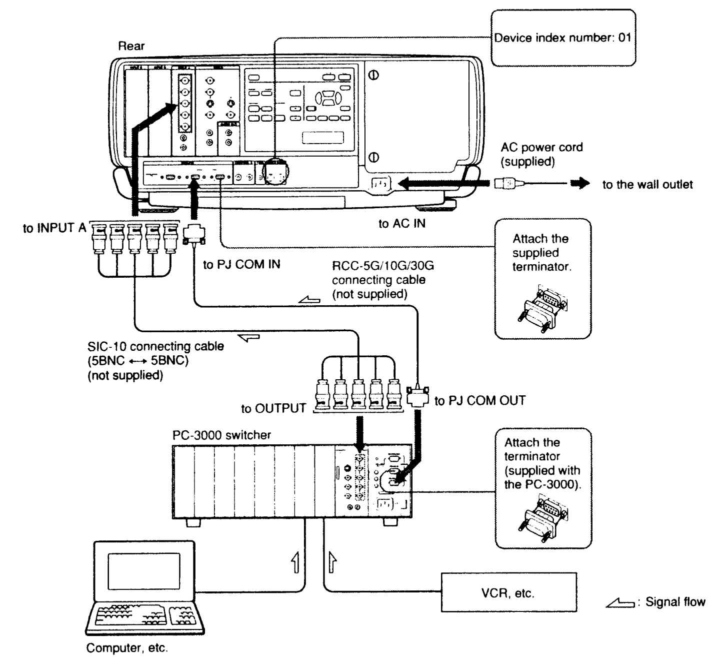
Connecting the Switcher

Use the optional PC-3000 Signal Interface Switcher for connecting various video equipment. The input can be selected by pressing the SWITCHER/VIDEO MEMORY/INDEX keys on the Remote Commander.
For selecting the input from the switcher, see page 12 (GB).

Notes

- When you select the input from the switcher, be sure to set the SWITCHER/VIDEO MEMORY/INDEX select switch to the SWITCHER position.
- When connecting the switcher, use the wired Remote Commander. If you use the wireless Remote Commander, activate the remote control detector on only one unit of the equipment connected through the PJ COM connector. For the other equipment, set SIRCS RECEIVER in the SET SETTING menu to OFF to deactivate the remote control detectors.
For details, see page 33 (GB).
- After all the connections are complete, attach the terminator (supplied) to the PJ COM connector on both the projector and switcher to which nothing is connected.

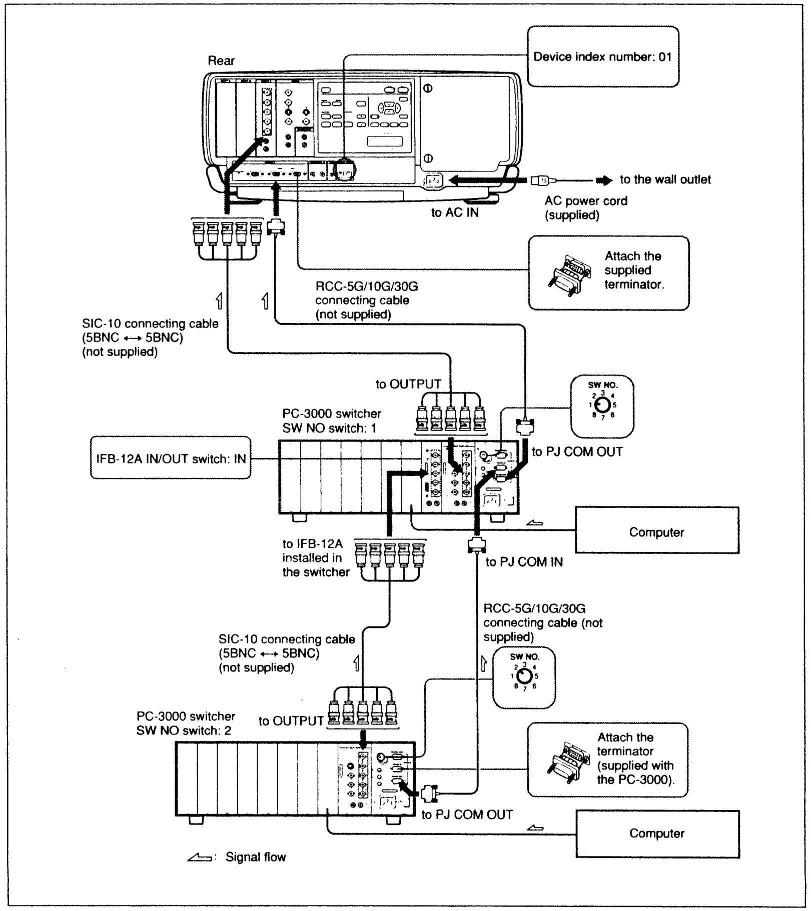
To connect a single switcher


Rear
Device index number: 01
AC power cord (supplied)
to the wall outlet
to AC IN
Attach the supplied terminator.
to INPUT A
to PJ COM IN
RCC-5G/10G/30G connecting cable (not supplied)
SIC-10 connecting cable (5BNC ↔ 5BNC) (not supplied)
to OUTPUT
to PJ COM OUT
PC-3000 switcher
Attach the terminator (supplied with the PC-3000).
VCR, etc.
Computer, etc.
: Signal flow

To connect two switchers

Notes

- Set the device index number of the projector to be connected to the switcher to 01.
- Set the SW NO switch on the switcher to be connected to the projector to 1. Install the IFB-12A interface board onto the switcher, and set the IN/OUT switch on the IFB-12A to IN.


Rear
Device index number: 01
to the wall outlet
AC power cord (supplied)
to AC IN
Attach the supplied terminator.
RCC-5G/10G/30G connecting cable (not supplied)
SIC-10 connecting cable (5BNC ↔ 5BNC) (not supplied)
to OUTPUT
PC-3000 switcher SW NO switch: 1
SW NO.
IFB-12A IN/OUT switch: IN
to PJ COM OUT
Computer
to IFB-12A installed in the switcher
to PJ COM IN
RCC-5G/10G/30G connecting cable (not supplied)
SIC-10 connecting cable (5BNC ↔ 5BNC) (not supplied)
SW NO.
PC-3000 switcher SW NO switch: 2
to OUTPUT
Attach the terminator (supplied with the PC-3000).
to PJ COM OUT
Computer
: Signal flow

Connection Examples

Connecting Multiple Projectors

Following are examples of multiple projectors installed onto the optional SU-PJ2000 projector stand, such as by stacking.

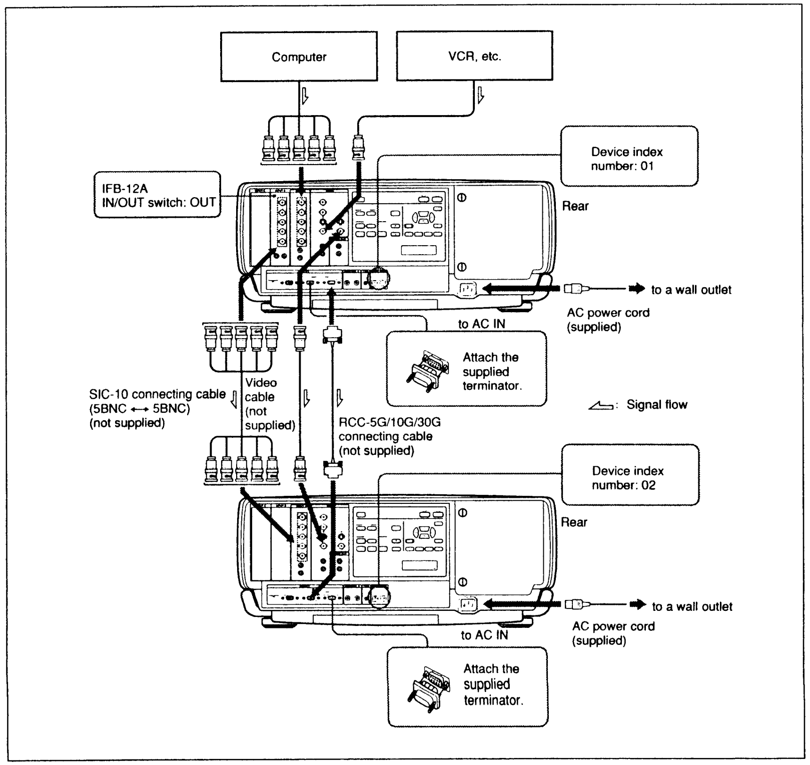
For details on the SU-PJ2000 projector stand, refer to the installation manual supplied with it.

When not using the switcher

Install the optional IFB-12A interface board in the first projector.
Set the IN/OUT switch on the IFB-12A to OUT.
For details on the IFB-12A interface board, refer to the operating instructions supplied with it.

Note

Installing the interface board and setting up the switch must be done while the power of the projector is off.

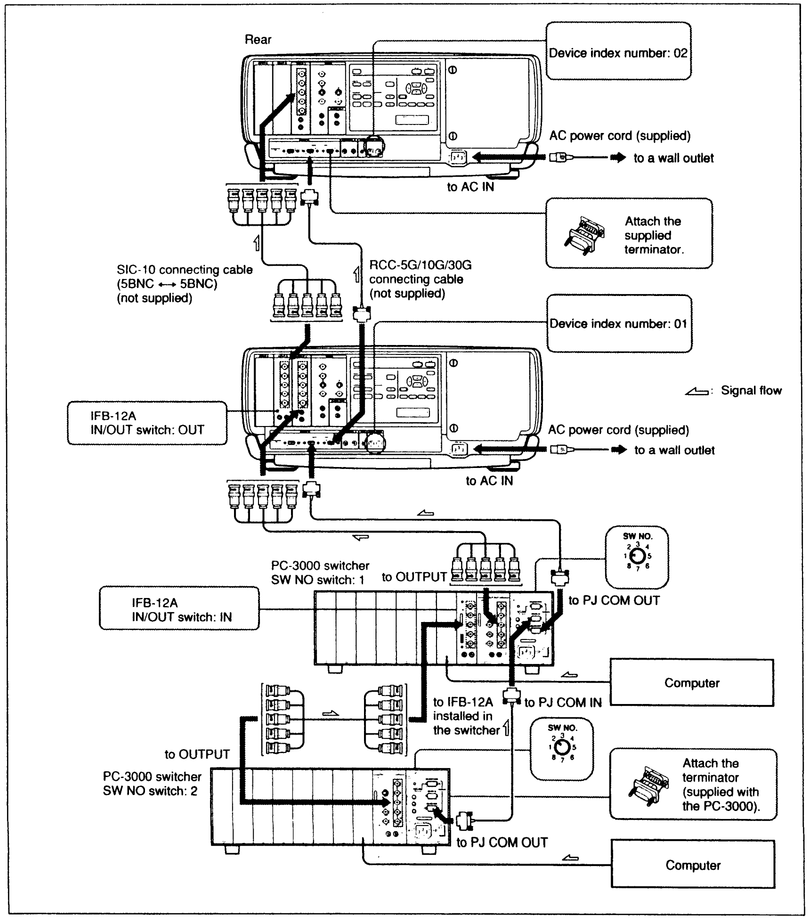

Computer
VCR, etc.
Device index number: 01
IFB-12A IN/OUT switch: OUT
Rear
to a wall outlet
AC power cord (supplied)
to AC IN
Attach the supplied terminator.
Video cable (not supplied)
SIC-10 connecting cable (5BNC ←→ 5BNC) (not supplied)
RCC-5G/10G/30G connecting cable (not supplied)
◁: Signal flow
Device index number: 02
Rear
to a wall outlet
to AC IN
AC power cord (supplied)
Attach the supplied terminator.

When using the switcher

When connecting two PC-3000 switchers, up to 15 inputs can be selected as the input from the switchers. Install the IFB-12A interface board in the first switcher (on which you set the SW NO switch to 1) and set the IN/OUT switch on the board to IN.

Notes

- Be sure to set the switcher number.
- Be sure to turn off the power of the projector when setting up the device index number and connecting cables.


Rear
Device index number: 02
AC power cord (supplied)
to a wall outlet
to AC IN
Attach the supplied terminator.
SIC-10 connecting cable (5BNC ←→ 5BNC) (not supplied)
RCC-5G/10G/30G connecting cable (not supplied)
Device index number: 01
◁: Signal flow
IFB-12A IN/OUT switch: OUT
AC power cord (supplied)
to a wall outlet
to AC IN
SW NO.
PC-3000 switcher SW NO switch: 1
to OUTPUT
to PJ COM OUT
IFB-12A IN/OUT switch: IN
Computer
to IFB-12A installed in the switcher
to PJ COM IN
SW NO.
to OUTPUT
PC-3000 switcher SW NO switch: 2
Attach the terminator (supplied with the PC-3000).
to PJ COM OUT
Computer

Confirming the System Construction

After all the connections are complete, confirm that equipment of the system is properly setup.

1 Connect the AC cords of all equipment to the AC outlets.

2 Press the SYS SET key on the Remote Commander.
You can also press the LIGHT and RESET keys simultaneously on the control panel for the same effect.
Information on the system construction and the settings of the interface boards, etc. are automatically confirmed. Then the message disappears.

Note

When you want to use the projector without connecting the switcher after using the switcher in the system connections, it is necessary to confirm the system construction again by pressing the SYS SET key or the LIGHT and RESET keys after all the connections are complete. If you press the key(s), "Master Switcher not exist" appears, but the system construction is automatically recognized.

When a system error is detected

The following messages are displayed on the screen and display window:

Message	Remedy
Master Switcher not exist.	Set the switcher that outputs the signal to the projector to number 1.
Same DEVICE INDEX for Projector detected.	Change either number of the projectors that have the same number.
Same DEVICE INDEX for Switcher detected.	Change either number of the switchers that have the same number.

Note

If the switcher is in standby mode, the message appears only in the message display window.

Setting the Index Numbers

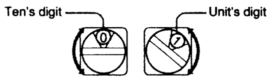
When you connect multiple projectors in your system, you have to set the group index and device index numbers for each projector.

To set the group index number

If you set the same group index number for multiple projectors, you can operate multiple projectors and switchers simultaneously (such as input selection) by designating the number.
The group index number can be set in the menu.
For group index number setting, see page 33 (GB).

To set the device index number

If you set the device index number, you can control each projector individually with the supplied Remote Commander.
The device index number can be set with the DEVICE INDEX switches on the rear of the projector. It is set to "01" at the factory.
If only one projector is connected, set it to "01."

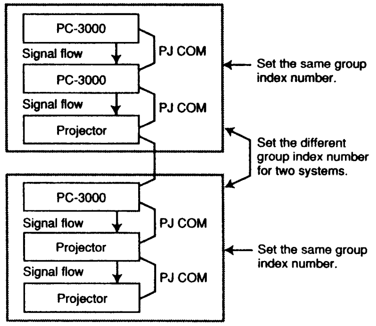


Notes

- Do not set the same device index number for the projectors in the same system.
- Do not set the number to "00." If you do, the projector will be operated only with the keys on the control panel. It cannot be controlled with the wired or wireless Remote Commander, or with an external equipment to which the PJ COM connectors are connected.

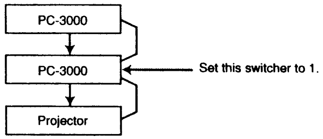
Notes on setting of the index number

- **Set the same group index number for all equipment of the same system connection (those on the signal route between the signal source and the projector).**


PC-3000
Signal flow
PC-3000
Signal flow
Projector
PJ COM
PJ COM
Set the same group index number.
Set the different group index number for two systems.
PC-3000
Signal flow
Projector
Signal flow
Projector
PJ COM
PJ COM
Set the same group index number.

For setting the group index number, see "GROUP INDEX" on page 33 (GB).

- **Set the correct group and device index numbers and the switcher number.**
  Do not set the same device index number or the same switcher number in one group.
  For example, if there are different pieces of equipment with the switcher number 1, the error message will appear when the SYS SET key is pressed.
- **Set the switcher that outputs the signal to the projector to number 1.**

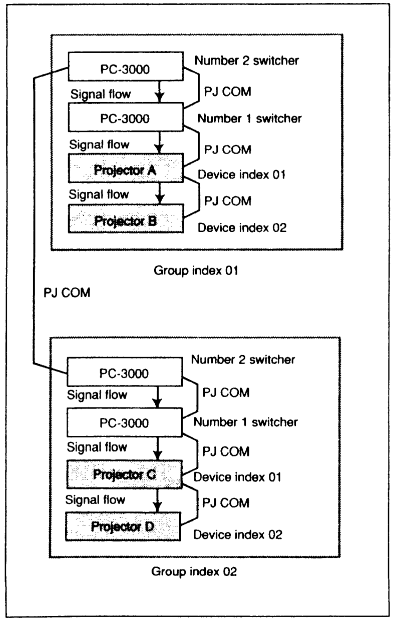


Notes on connections when two or more switchers are used

- **Mount the IFB-12A interface board to the slot 1 of the number n switcher and connect the output connector of the number (n+1) switcher to the IFB-12A.**
- **You can attach the IFB-12A signal interface board (when the IN/OUT switch is set to OUT) only to the number 1 switcher.**

To select the projector by designating the index numbers

When the switchers and projectors are connected as illustrated, select the desired projector by pressing the keys on the Remote Commander as shown below.


PC-3000
Number 2 switcher
Signal flow
PJ COM
PC-3000
Number 1 switcher
Signal flow
PJ COM
Projector A
Device index 01
Signal flow
PJ COM
Projector B
Device index 02
Group index 01
PJ COM
PC-3000
Number 2 switcher
Signal flow
PJ COM
PC-3000
Number 1 switcher
Signal flow
PJ COM
Projector C
Device index 01
Signal flow
PJ COM
Projector D
Device index 02
Group index 02

Example:

To select all the projectors
GROUP → ALL → ENTER → ALL → ENTER
Projectors A, B, C and D are selected.

To select projectors with device index 01 from all the groups
GROUP → ALL → ENTER → 1 → ENTER
Projectors A and C are selected.

To select a projector with device index 01 from group index 02
GROUP → 2 → ENTER → 1 → ENTER
Projector C is selected.

To select all the projectors from group index 02
GROUP → 2 → ENTER → ALL → ENTER
Projectors C and D are selected.

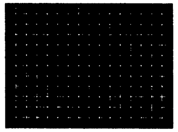
Notes

- Set the group index and device index numbers correctly. If more than two projectors are set to the same group index and device index numbers, an error message will be displayed when the SYS SET key is pressed.
- If the group index is a tens digit number, press the GROUP key before each press of the number key.
  Example:
  To select a projector with device index 13 of group index 12
  GROUP → 1 → GROUP → 2 → ENTER → 1 → 3 → ENTER

Adjusting the Picture

This section describes how to adjust the focus, size and vertical position of the picture when the projector is installed on the floor. For twin/triple stack installation, refer to the Installation Manual supplied with the SU-PJ2000 projector stand.

1 Press the PATTERN key on the Remote Commander or the control panel to display the HATCH pattern.



2 Press the FOCUS key then the ↑ or ↓ key on the Remote Commander or the control panel to adjust the focus.

"FOCUS" appears on the screen during adjustment.

3 Press the ZOOM key then the ↑ or ↓ key on the Remote Commander or the control panel to adjust the picture size.

"ZOOM" appears on the screen during adjustment.

Note

If the optional VPLL-2075, VPLL-2014, VPLL-2009 or VPLL-3050 lens is installed, you cannot adjust the zoom.

4 Press the FOCUS and arrow keys on the Remote Commander or the control panel to adjust the focus again.

"FOCUS" appears on the screen during adjustment.

5 Press the SHIFT key then the arrow keys on the Remote Commander or the control panel to adjust the vertical position of the picture.

"PICTURE SHIFT" appears on the screen during adjustment.

6 Press the PATTERN key again to clear the HATCH pattern.

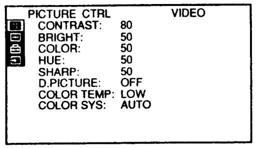
Note

Do not look into the lens when the projector lamp is on.

Using the Menu

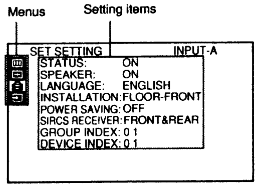
The projector is equipped with an on-screen menu for making various adjustments and settings.
Unadjustable items are not displayed in the menu.
To change the language used in the menu, see page 33 (GB).

1 Press the MENU key.
The menu display appears.
The menu presently selected is highlighted in yellow.



PICTURE CTRL VIDEO
CONTRAST: 80
BRIGHT: 50
COLOR: 50
HUE: 50
SHARP: 50
D.PICTURE: OFF
COLOR TEMP: LOW
COLOR SYS: AUTO

2 Use the ↑ or ↓ key to select a menu, then press the → or the ENTER key.
The setting items of the selected menu are displayed.



SET SETTING INPUT-A
STATUS: ON
SPEAKER: ON
LANGUAGE: ENGLISH
INSTALLATION: FLOOR-FRONT
POWER SAVING: OFF
SIRCS RECEIVER: FRONT&REAR
GROUP INDEX: 0 1
DEVICE INDEX: 0 1

3 Use the ↑ or ↓ key to select the item, then press the → or the ENTER key.

4 Adjust an item.
- **When changing the adjustment level:**
  To increase the number, press the ↑ or → key.
  To decrease the number, press the ↓ or ← key.
  Press the ENTER key to restore the original screen.

- **When changing the setting:**
  Press the ↑ or ↓ key to change the setting, then press the ← or the ENTER key.
  The original screen is restored.

For details on setting individual items, see the relevant menu pages.

To erase the menu display

Press the MENU key. The menu display also disappears automatically if no key is pressed for one minute.

To reset settings that have been adjusted

Press the RESET key.
"Reset complete!" appears on the screen and the settings appearing on the screen will be reset to their factory preset values.

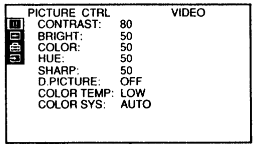
Items that can be reset are as follows:
CONTRAST, BRIGHT, COLOR, HUE, SHARP, DOT PHASE, SIZE, SHIFT and BLANKING.

About the memory of the settings

The settings are automatically stored in the projector memory.

The PICTURE CTRL Menu

The PICTURE CTRL menu is used for adjusting the picture. Unadjustable items are not displayed in the menu.



PICTURE CTRL VIDEO
CONTRAST: 80
BRIGHT: 50
COLOR: 50
HUE: 50
SHARP: 50
D.PICTURE: OFF
COLOR TEMP: LOW
COLOR SYS: AUTO

CONTRAST

Adjusts the picture contrast.
The higher the setting, the greater the contrast.
The lower the setting, the lower the contrast.

BRIGHT (Brightness)

Adjusts the picture brightness.
The higher the setting, the brighter the picture.
The lower the setting, the darker the picture.

COLOR

Adjusts color intensity.
The higher the setting, the greater the intensity.
The lower the setting, the lower the intensity.

HUE

Adjusts skin tones.
At high settings, the picture becomes greenish.
At low settings, the picture becomes purplish.

SHARP (Sharpness)

Adjusts the picture sharpness.
The higher the setting, the sharper the picture.
The lower the setting, the softer the picture.

D. (Dynamic) PICTURE

Emphasizes the black color.
ON: Emphasizes the black color to produce a bolder "dynamic" picture.
OFF: Reproduces the dark portions of the picture accurately, in accordance with the source signal.

COLOR TEMP (temperature)

Adjusts the color temperature.
HIGH: Makes the white color bluish.
LOW: Makes the white color reddish.

COLOR SYS (system)

Selects the color system of the input signal.
Normally, set to AUTO.
If the picture is distorted or colorless, select the color system ($\text{NTSC}_{3.58}$/PAL/SECAM/$\text{NTSC}_{4.43}$/PAL-M) according to the input signal.

GAMMA MODE

Select either position to obtain an optimum picture.
GRAPHICS: Improves the reproduction of half tones. Photos can be reproduced in natural tones.
TEXT: Contrasts black and white. Suitable for images with lots of text.

Input signals and adjustable/setting items

Item	Input signal					
	Video or S video	15k RGB	Component/ Progressive component	RGB (preset)	RGB (preset) (HDTV, DTV)	RGB (not preset)
CONTRAST	Y	Y	Y	Y	Y	Y
BRIGHT	Y	Y	Y	Y	Y	Y
COLOR	Y	Y	Y	N	Y	N
HUE	Y (NTSC 3.58/ 4.43[1] only)	Y	Y	N	Y	N
SHARP	Y	Y	Y	N	Y	N
D. PICTURE	Y	N	Y	N	N	N
COLOR TEMP	Y	Y	Y	Y	Y	Y
COLOR SYS	Y	N	N	N	N	N
GAMMA MODE	N	N	N	Y	N	Y

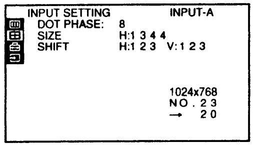
Y: Adjustable/can be set
N: Not adjustable/cannot be set

---

[1] $\text{NTSC}_{4.43}$ is the color system used when playing back a video recorded in NTSC color system on a $\text{NTSC}_{4.43}$ system VCR.

The INPUT SETTING Menu

The INPUT SETTING menu is used to change the settings of the input signal. Unadjustable items, which vary according to the input signal, are not displayed in the menu.



```
INPUT SETTING          INPUT-A
  DOT PHASE:  8
  SIZE        H:1 3 4 4
  SHIFT       H:1 2 3  V:1 2 3



                       1024x768
                       NO . 2 3
                       →    2 0
```

DOT PHASE

Adjusts the phase of the LCD panel and the input signal when H FILTER is set to OFF.
Adjust the value to obtain the clearest picture.

SIZE

Adjusts the horizontal size of the picture.
As the setting for H increases, the horizontal size of the picture becomes larger, and as the setting decreases, the size becomes smaller. Adjust the setting according to the input signal.
Use the ← or → key to adjust the horizontal size.

SHIFT

Adjusts the position of the picture.
H adjusts the horizontal position of the picture, and V adjusts the vertical position. As the setting for H increases, the picture moves to the right, and as the setting decreases, it moves to the left.
As the setting for V increases, the picture moves up, and as the setting decreases, it moves down.
Use the ← or → key to adjust the horizontal position and the ↑ or ↓ key for the vertical position.

SCAN CONV (converter)

Converts the signal to display the picture so that it fits the screen size.

ON: Displays the picture to fill the 4:3 screen. The picture will lose some clarity.

OFF: Displays the picture while matching one pixel of input picture element to that of the LCD. The picture will be clear but the picture size will be smaller.

Note

The function does not work for signals in Memory No. 32 and 33.

ASPECT

Sets the aspect ratio of the picture.
When inputting 16:9 (squeezed) signal from equipment such as a DVD player, set to 16:9.

4:3: When the picture with ratio 4:3 is input

16:9: When the picture with ratio 16:9 (squeezed) is input

H FILTER

Corrects the vertical bands that appear on the picture. The vertical bands may occur when an RGB signal with horizontal resolution of more than 1280 x 1024 pixels is input. In such cases, set to ON. The picture will loose some clarity, but the vertical bands will be reduced. Set to OFF to associate a dot of the input signal with a pixel of the LCD.

BLANKING

Adjusts if excess signals are seen with the picture, or the whole picture is not seen clearly.
Select BLANKING, then press the ENTER key to display the blanking adjustment screen.
Use the ↑ or ↓ key to select the part to be adjusted (TOP, BOTOM, RIGHT or LEFT), and the ← or → key to adjust.

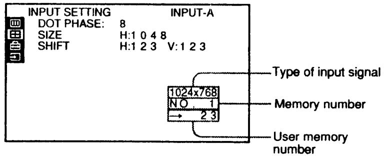
Input signals and adjustable/setting items

Item	Input signal				
	Video or S video	15k RGB	Component/ Progressive component	RGB (preset)	RGB (not preset)
DOT PHASE	N	N	N	Y (except for HDTV, DTV)	Y
SIZE	N	N	Y	Y	Y
SHIFT	Y	Y	Y	Y	Y
SCAN CONV	N	N	N	Y (Only for lower resolution than SXGA)	Y (Only for lower resolution than SXGA)
ASPECT	Y	Y	Y	N	N
H FILTER	N	N	N	Y (UXGA only)	Y (UXGA only)
BLANKING	Y (TOP and BOTTOM only)	Y (TOP and BOTTOM only)	Y (TOP and BOTTOM only)	Y (HDTV, DTV only)	Y

Y: Adjustable/can be set
N: Not adjustable/cannot be set

INPUT MEMORY No.

The upper number indicates the memory number of the current input signal. The lower number indicates the user memory number.



```
INPUT SETTING          INPUT-A
  DOT PHASE:  8
  SIZE        H:1 0 4 8
  SHIFT       H:1 2 3  V:1 2 3


                       1024x768
                       NO .   1
                       →    2 3
```

About the memory function

The adjustment data for 48 types of input signals are preset at the factory (preset memory).
When a signal is input to the projector, the signal type is automatimally detected and the data for the signal is called from the memory to display an optimum picture. The data can be adjusted in the INPUT SETTING menu and the adjusted data will be saved as user memory.
When you save more than 200 user memories, the newest one always overwrites the oldest one.
The saved user memory number is displayed in the INPUT SETTING menu as → NO. □□.
When an RGB signal other than the preset signals is input to the projector, the memory number is displayed as 0 and the closest option is automatically selected from the preset 48 types of signals.

Notes

- When an RGB signal is input with sync on Green including external sync, the picture tone may be greenish. In this case, disconnect the external sync signal.
- When an HDTV 1035/60i signal is input, the picture will appear smaller. Adjust SIZE, SHIFT and BLANKING referring to the following levels as a standard.
  SIZE H: 1479
  SHIFT H: 321
  V: 41
  BLANKING TOP: 167
  BOTTOM: 167
  RIGHT: 27
  LEFT: 27
- If SCAN CONV is set to ON when a signal in Memory No. 34–38 is input, the picture will appear widened. Adjust SIZE and SHIFT, referring to the following levels as a standard.

Memory No.		34	35	36	37	38
SIZE		1590	1575	1590	1582	1620
SHIFT	H	181	170	182	146	154
	V	18	32	36	36	42

The INPUT SETTING Menu

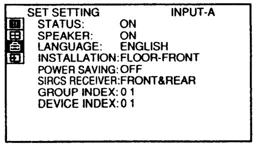
Memory No.	Preset signal		fH (kHz)	fV (Hz)	Sync	Horizontal size
1	Video 60 Hz		15.73	59.94	—	—
2	Video 50 Hz		15.63	50.00	—	—
3	15k RGB (60 Hz)		15.73	59.94	S on G	—
4	15k RGB (50 Hz)		15.63	50.00	S on G	—
5	HDTV		33.75	60.00	S on Y/G	1543
6	640 x 350	VGA-1 (VGA350)	31.47	70.09	H-pos V-neg	800
7		VESA* 85(VGA350)	37.86	85.08	H-pos V-neg	832
8	640 x 400	NEC PC98	24.82	54.42	H-neg V-neg	848
9		VGA-2 (TEXT) /VESA70	31.47	70.09	H-neg V-pos	800
10		VESA 85 (VGA400)	37.86	85.08	H-neg V-pos	832
11	640 x 480	VGA VESA60	31.47	59.94	H-neg V-neg	800
12		Mac 13	35.00	66.67	S on G	864
13		VGA VESA 72	37.86	72.81	H-neg V-neg	832
14		VGA VESA 75 (IBM M3)	37.50	75.00	H-neg V-neg	840
15		VGA VESA 85 (IBM M4)	43.27	85.01	H-neg V-neg	832
16	800 x 600	SVGA VESA 56	35.16	56.25	H-pos V-pos	1024
17		SVGA VESA 60	37.88	60.32	H-pos V-pos	1056
18		SVGA VESA 72	48.08	72.19	H-pos V-pos	1040
19		SVGA VESA 75 (IBM M5)	46.88	75.00	H-pos V-pos	1056
20		SVGA VESA 85	53.67	85.06	H-pos V-pos	1048
21	832 x 624	Mac 16	49.72	74.55	H-neg V-neg	1152
22	1024 x 768	XGA VESA 43 (8514)	35.52	86.96	H-pos V-pos	1264
23		XGA VESA 60	48.36	60.00	H-neg V-neg	1344
24		XGA VESA 70	56.48	69.96	H-neg V-neg	1328
25		XGA VESA 75	60.02	75.03	H-pos V-pos	1312
26		XGA VESA 85	68.68	85.00	H-pos V-pos	1376
27	1152 x 864	VESA 70	64.00	70.02	H-pos V-pos	1472
28		VESA 75	67.50	75.00	H-pos V-pos	1600
29		VESA 85	77.49	85.06	H-pos V-pos	1568
30	1152 x 900	SUN LO	61.80	65.96	H-neg V-neg	1504
31		SUN HI	71.71	76.05	C-neg	1472
32	1280 x 960	VESA 60	60.00	60.00	H-pos V-pos	1800
33		VESA 75	75.00	75.00	H-pos V-pos	1728
34	1280 x 1024	SXGA VESA 43	46.43	86.87	H-pos V-pos	1696
35		SGI-5	53.32	50.06	H-neg V-neg	1680
36		SXGA VESA 60	63.97	60.01	S on G	1696
37		SXGA VESA 75	79.98	75.03	H-pos V-pos	1688
38		SXGA VESA 85	91.15	85.02	H-pos V-pos	1728

Memory No.	Preset signal		fH (kHz)	fV (Hz)	Sync	Horizontal size
39	1600 x 1200	UXGA VESA 60	75.00	60.00	H-pos V-pos	1689
40		UXGA VESA 65	81.91	65.53	H-pos V-pos	1689
41		UXGA VESA 75	93.75	75.00	H-pos V-pos	1689
43	480/60p (Progressive component)		31.47	60.00	S on G	1605
44	575/50p (Progressive component)		31.25	50.00	S on G	1616
45	1080/50i		28.13	50.00	—	1852
47	720/60p		45.00	60.00	—	1736
48	720/50p		37.50	50.00	—	2084
49	1080/48i		27.00	48.00	—	1929

* VESA is a registered trademark of Video Electronics Standard Association.

The SET SETTING Menu

The SET SETTING menu is used for changing the initial settings of the projector. Unadjustable items are not displayed in the menu.



```
SET SETTING                INPUT-A
  STATUS:      ON
  SPEAKER:     ON
  LANGUAGE:    ENGLISH
  INSTALLATION:FLOOR-FRONT
  POWER SAVING:OFF
  SIRCS RECEIVER:FRONT&REAR
  GROUP INDEX:0 1
  DEVICE INDEX:0 1
```

STATUS

Sets up the on-screen display.

ON: Shows all of the on-screen displays.

OFF: Turns off the on-screen displays except for the menus and warning messages.

SPEAKER

Set to OFF to cut off the sound of the internal speaker when external speakers are connected. When set to OFF, "SPEAKER OFF" appears on the screen when you turn on the power.

LANGUAGE

Selects the language used in the menu and on-screen displays.
Available languages are: English, French, German, Italian, Spanish, Japanese and Chinese.

INSTALLATION

Reverses the picture horizontally or vertically.

FLOOR-FRONT: The picture is not reversed.

CEILING-FRONT: The picture is reversed horizontally and vertically.

FLOOR-REAR: The picture is reversed horizontally.

CEILING-REAR: The picture is reversed vertically.

Note

In case of using a mirror, be careful of installation since the picture may be reversed.

POWER SAVING

When set to ON, the projector goes into the power saving mode and the lamp for light source turns off if no signal is input for about 10 minutes.
The power saving mode is canceled when a signal is input or any key is pressed.

SIRCS RECEIVER

Selects the remote control detectors to be activated. Change the setting if the wireless Remote Commander does not work properly due to the influence of the fluorescent lamp, etc.

FRONT & REAR: Activates both the front and rear detectors.

FRONT: Activates the front detector only.

REAR: Activates the rear detector only.

OFF: Activates neither the front nor rear detector.

Note

When set to OFF, the wireless Remote Commander does not function. Use the keys on the control panel or the wired Remote Commander.

GROUP INDEX

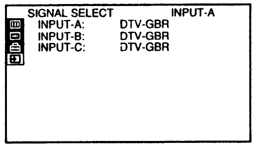
Groups multiple projectors or switchers to operate them simultaneously.
You can set the group index number to the desired number between 01 and 99.
For details for setting the group index, see pages 25 (GB) and 26 (GB).

DEVICE INDEX

Displays the index number set with the INDEX switches on the rear of the projector. You can check the device index number but cannot set it with this menu.
For details for setting the number, see page 25 (GB).

The SIGNAL SELECT Menu

The SIGNAL SELECT Menu is used for selecting the input signal.
Depending on the interface board installed in the projector, some items may not be displayed in the menu.



```
SIGNAL SELECT            INPUT-A
  INPUT-A:      DTV-GBR
  INPUT-B:      DTV-GBR
  INPUT-C:      DTV-GBR
```

Use the ♦ or ♦ key to select the input, then press the ENTER key.

INPUT-A

Selects audio and video signals input from the INPUT A connectors.

COMPUTER: Inputs the signal from a computer or the RGB signal for a still picture.
COMPONENT: Inputs the component signal.
DTV-YP$_B$P$_R$: Inputs the DTV (YP$_B$P$_R$) or HDTV (YP$_B$P$_R$) signal.
DTV-GBR: Inputs the DTV (GBR) or HDTV (GBR) signal.

Note

When the PC-3000 signal interface switcher is connected to the INPUT A connectors, you cannot select the item.

INPUT-B

Selects the input signal from the connectors on the optional IFB-12A interface board installed in the INPUT B section.

COMPUTER: Inputs the signal from a computer or the RGB signal for a still picture.
COMPONENT: Inputs the component signal.
DTV-YP$_B$P$_R$: Inputs the DTV (YP$_B$P$_R$) or HDTV (YP$_B$P$_R$) signal.
DTV-GBR: Inputs the DTV (GBR) or HDTV (GBR) signal.
VIDEO: Inputs the composite video signal.
S-VIDEO: Inputs the S video signal.

Note

This item is not displayed when the optional interface board other than the IFB-12A is installed in the INPUT B section, or when the output mode is selected on the IFB-12A.

INPUT-C

Selects the input signal from the connectors on the optional IFB-12A interface board installed in the INPUT C section.

COMPUTER: Inputs the signal from a computer or the RGB signal for a still picture.
COMPONENT: Inputs the component signal.
DTV-YP$_B$P$_R$: Inputs the DTV (YP$_B$P$_R$) or HDTV (YP$_B$P$_R$) signal.
DTV-GBR: Inputs the DTV (GBR) or HDTV (GBR) signal.
VIDEO: Inputs the composite video signal.
S-VIDEO: Inputs the S video signal.

Note

This item is not displayed when the optional interface board other than the IFB-12A is installed in the INPUT C section.

The SERVICE MODE Menus

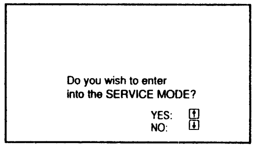
Follow the steps below for entering into the SERVICE MODE. The SERVICE MODE is available even when only one of the four lamps for light source functions. Accordingly, you can enter into the mode even if the projector is in standby mode.
Confirm that the menu is not displayed on the screen.

Note

Be sure to set STATUS in the SET SETTING menu to ON. If it is set to OFF, you cannot enter into the SERVICE MODE.

Operation when the projector is on

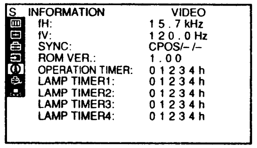
1 Press the keys on the control panel in the following order:
ENTER key, ENTER key, ♦ key, ♦ key, ENTER key
The following screen appears.



```
Do you wish to enter
into the SERVICE MODE?
              YES: ↑
              NO:  ↓
```

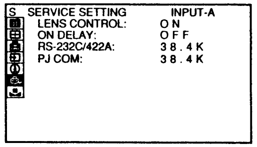
2 Press the ♦ key.
The projector enters into the SERVICE MODE.

3 Press the MENU key.
The SERVICE MODE select menu appears. When the projector enters into the SERVICE MODE, "S" appears on the upper-left corner of the screen.



```
S  INFORMATION               VIDEO
     fH:                  1 5 . 7 kHz
     fV:                  1 2 0 . 0 Hz
     SYNC:                CPOS/– /–
     ROM VER.:            1 . 0 0
     OPERATION TIMER:     0 1 2 3 4 h
     LAMP TIMER1:         0 1 2 3 4 h
     LAMP TIMER2:         0 1 2 3 4 h
     LAMP TIMER3:         0 1 2 3 4 h
     LAMP TIMER4:         0 1 2 3 4 h
```

4 Press the ♦ or ♦ key to select the menu, then press the ➡ key or the ENTER key.
The selected menu appears.

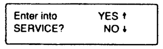


```
S  SERVICE SETTING          INPUT-A
     LENS CONTROL:        O N
     ON DELAY:            O F F
     RS-232C/422A:        3 8 . 4 K
     PJ COM:              3 8 . 4 K
```

5 Make setting or adjustment on the item.
For details on setting individual items, see pages 36 (GB) to 38 (GB).

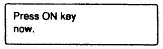
Operation when the projector is in standby mode

1 Press the keys on the control panel in the following order:
ENTER key, ENTER key, ♦ key, ♦ key, ENTER key
The following message appears in the display window of the control panel.



```
Enter into    YES ↑
SERVICE?      NO ↓
```

2 Press the ♦ key.



```
Press ON key
now.
```

3 Press the ON key within 5 seconds.
The projector enters into the SERVICE MODE.

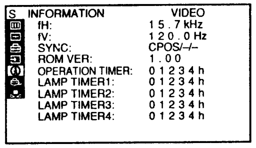
4 Follow the steps 3 to 5 on the left.

The SERVICE MODE Menus

There are three menus in the SERVICE MODE: INFORMATION, SERVICE SETTING, and W/B ADJUST menus.

The INFORMATION Menu

The INFORMATION menu shows the information about the current input signal and the number of operated hours of the projector and lamp.



```
S  INFORMATION              VIDEO
     fH:                    1 5 . 7 kHz
     fV:                    1 2 0 . 0 Hz
     SYNC:                  CPOS/–/–
     ROM VER:               1 . 0 0
     OPERATION TIMER:       0 1 2 3 4 h
     LAMP TIMER1:           0 1 2 3 4 h
     LAMP TIMER2:           0 1 2 3 4 h
     LAMP TIMER3:           0 1 2 3 4 h
     LAMP TIMER4:           0 1 2 3 4 h
```

fH (Horizontal frequency)

Indicates the horizontal frequency of the input signal. The value is not absolute but is only used as a reference.

fV (Vertical frequency)

Indicates the vertical frequency of the input signal. The value is not absolute but is only used as a reference.

SYNC

Indicates the type and the polarity of the sync signal. The indications show the polarity of the composite or horizontal sync signal, vertical sync signal and sync on G signal from the left to the right.

CPOS: The polarity of the composite sync signal is positive.

CNEG: The polarity of the composite sync signal is negative.

POS: The polarity of the sync signal is positive.

NEG: The polarity of the sync signal is negative.

SonG: Sync on green signal

– : No sync signal is input.

ROM VER.

Indicates the ROM version number of the projector.

OPERATION TIMER

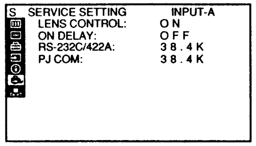
Indicates the total number of hours for which the projector has been operated.

LAMP TIMER 1–4

Indicates the total number of hours for which the lamp currently used has been operated.
The number of hours of the lamp that has burnt out is indicated in red.

The SERVICE SETTING Menu

The SERVICE SETTING menu is for the settings to be adjusted before operation.



```
S  SERVICE SETTING          INPUT-A
     LENS CONTROL:          O N
     ON DELAY:              O F F
     RS-232C/422A:          3 8 . 4 K
     PJ COM:                3 8 . 4 K
```

Operation

1. Select an item
Use the ↑ or ↓ key to select the item, then press the → or the ENTER key.

2. Change the setting
Press the ↑ or ↓ key to change the setting.

3. Restore the original screen
Press the ← or the ENTER key.
The original screen is restored.

LENS CONTROL

When set to OFF, the SHIFT, FOCUS and ZOOM keys on the Remote Commander and the control panel do not function. To activate the keys, set to ON.

ON DELAY

When connecting multiple projectors, set to ON to turn on the projectors sequentially one by one. The delay time depends on the device index number on each projector.

RS-232C/422A

Sets the data transmission rate of the RS-232C/422A connector.

Note

Set the same data transmission rate for all the projectors and computers.

PJ COM

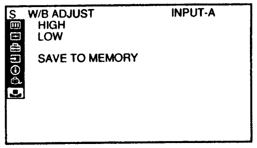
Sets the data transmission rate of the PJ COM connector.

Note

Set the data transmission rate of all equipment connected via the PJ COM connector to the same rate.

The W/B ADJUST Menu

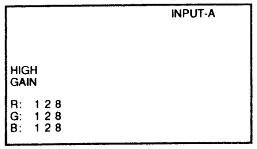
The W/B ADJUST menu sets the values of the COLOR TEMP in the PICTURE CTRL menu.



S W/B ADJUST INPUT-A
HIGH
LOW
SAVE TO MEMORY

Operation

1. Select the COLOR TEMP item to be set
Use the ↑ or ↓ key to select HIGH or LOW, then press the → or ENTER key.
The projector enters into GAIN/BIAS adjustment mode.



INPUT-A
HIGH
GAIN
R: 1 2 8
G: 1 2 8
B: 1 2 8

2. Select the item to be adjusted
Use the ↓ key to select the item.
Each time the ↓ key is pressed, the selected color item appears in the following order.

R (GAIN) → G (GAIN) → B (GAIN)
↑ ↓
B (BIAS) ← G (BIAS) ← R (BIAS)

3. Adjust an item
To increase the number, press the → key.
To decrease the number, press the ← key.

4. Restore the original screen
Press the ENTER key.
The original screen is restored.

To cancel the adjusted values

Turn off the projector. The saved data in the memory will be retrieved when the projector is turned on again.

HIGH

Changes the color temperature of the COLOR TEMP's HIGH setting value in the PICTURE CONTROL menu.

LOW

Changes the color temperature of the COLOR TEMP's LOW setting value in the PICTURE CONTROL menu.

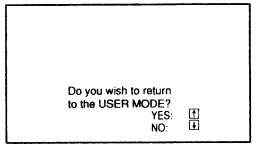
SAVE TO MEMORY

Saves the settings of HIGH and LOW levels of COLOR TEMP if you select SAVE TO MEMORY with the ↑ or ↓ key and press the ENTER key.

Restoring the USER MODE

Normally, once you turn off the power using the STANDBY key on the Remote Commander after making adjustments, the USER MODE is automatically restored when you turn on the power again.
To restore the USER MODE before turning off the power, follow the steps below.

1 Press the keys on the control panel in the following order:
ENTER key, ENTER key, ↑ key, ↓ key, ENTER key
The following screen appears.



Do you wish to return
to the USER MODE?
YES: ↑
NO: ↓

2 Press the ↑ key.
The projector goes back into the USER MODE.
You cannot display the SERVICE MODE menus.

Maintenance

Replacing the Lamp

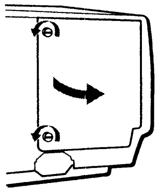
When the lamp has burnt out, the LAMP FAIL indicators at the rear of the projector light. In this case, replace the lamp with a new LMP-Q120 projector lamp (not supplied).

Note
Immediately after turning off the power, the lamp is extremely hot. Wait at least one hour before changing the lamp to give it enough time to cool down.

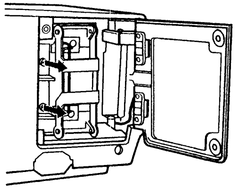
To remove the lamp unit

1 Press the STANDBY key to set the projector to standby mode, and unplug the power cord.

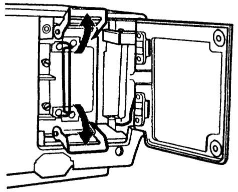
2 Remove the two screws with a coin or similar object, or a screwdriver, to open the lamp cover.



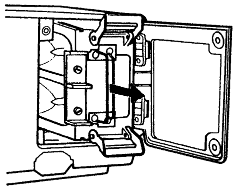
3 Loosen the two screws that fasten the lamp.



4 Fold out the levers up and down.

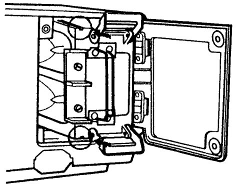


5 Pull out the lamp by holding the handles.

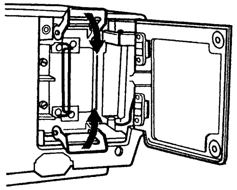


To install a new lamp

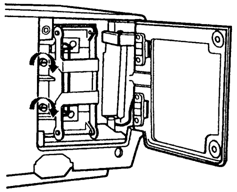
1 Mount the lamp with the grooves on the top and bottom aligned with the guides on the projector.



2 Push the lamp completely until it clicks.
Fold down the levers to fix the lamp to the projector.

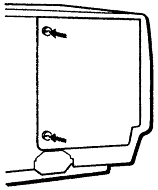


3 Tighten the two screws to secure the lamp.



(continued)

4 Replace the lamp cover and push to tighten the two screws to fix the cover.



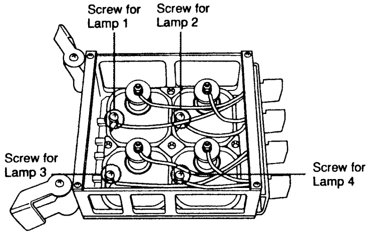
To replace a burnt lamp

If a lamp has burnt out, the FAIL LAMP indicator of that lamp lights. Check the number of the burnt lamp, and replace it with a new projector lamp (not supplied). Be sure to use the LMP-S120 projector lamp.

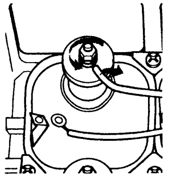
Notes

- The LMP-S120 is stamped with the part No. 1-517-912-11. Before replacing the lamp, be sure to check the number.
- When replacing two or more lamps, replace the lamps one after another paying attention to the connections.
- When replacing a lamp, be careful not to overtighten the screws.

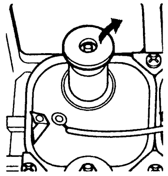
1 Remove the screw for the lamp to be replaced.
Example: To replace Lamp 1



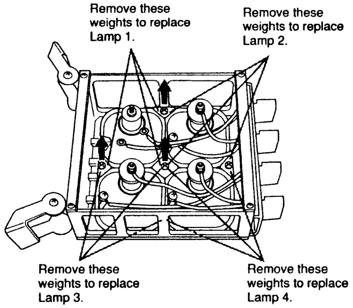
2 Remove the hexagonal nut to disconnect the cable.



3 Remove the lamp heat sink.

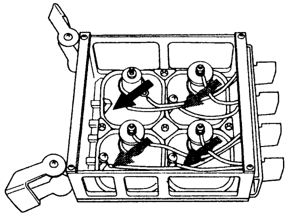


4 Remove the lamp weights.
The positions of the weights to be removed vary depending on Lamp 1–4.


Remove these weights to replace Lamp 1.
Remove these weights to replace Lamp 2.
Remove these weights to replace Lamp 3.
Remove these weights to replace Lamp 4.

5 Remove the lamp, and install a new lamp.

6 Secure the lamp by performing the steps above in reverse order.
Tighten the screw for the lamp while pressing the lamp in the direction of the arrows. For replacement of the lamp 2, 3 or 4, perform in the same way.



To reset the number of operated hours of the lamps in the message display window

1 Plug in the power cord and set the projector to standby mode.

2 Press the LIGHT, ←, → and ENTER keys on the control panel in sequence. Press each key within 5 seconds.

```
TIMER RESET?
LAMP: 1
```

3 Press the ↑ or ↓ key to display 1, 2, 3, 4 or ALL.
To reset the number of operated hours for Lamp 1, 2, 3 or 4, respectively, display 1, 2, 3 or 4.
To reset the number of operated hours for all the lamps at the same time, display ALL.

```
TIMER RESET?
LAMP: ALL
```

4 Press the ENTER key.

```
TIMER RESET??
LAMP: ALL
```

5 Press the ENTER key again.
The projector will exit the reset mode if ALL was selected in step 3.
If you selected 1, 2, 3 or 4, the display returns to that in step 3. Go to step 6.

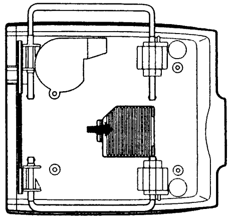
6 To exit the reset mode, display EXIT and press the ENTER key.
If you want to reset the number of operated hours of other lamps, repeat steps 3 to 6.

Cleaning the Air Filter

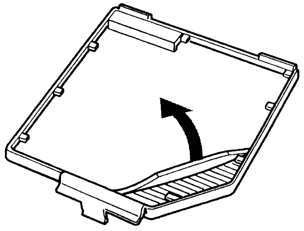
The air filter should be cleaned in every 100 hours. When it becomes difficult to remove the dust from the filter, replace the filter with a new one.

1 Turn off the power of the projector and unplug the power cord.

2 Remove the air filter cover on the bottom of the projector.



3 Remove the air filter.



4 Remove the dust from the filter with a vacuum cleaner.

5 Attach the air filter and replace the cover.

Notes

- If the air filter is excessively dirty, wash it with mild detergent solution and dry it in a shaded place.
- Be sure to attach the air filter cover firmly; the power will not be turned on if it is not closed securely.

Troubleshooting

If the projector appears to be operating erratically, try to diagnose and correct the problem, using the following guide. If the problem still persists, consult with qualified Sony personnel.

Symptom	Cause	Remedy
The power is not turned on.	The power has been turned off and on with the ON key at a short interval.	Wait for about one minute before turning on the power *(see page 7 (GB))*.
	The lamp cover is detached.	Attach the lamp cover securely.
	The air filter cover is detached.	Attach the air filter cover securely *(see page 41 (GB))*.
No picture and no sound.	Cable is disconnected.	Check that the proper connections have been made *(see pages 18 (GB) – 24 (GB))*.
	Input selection is not correct.	Select the input source correctly in the SIGNAL SELECT menu *(see page 34 (GB))*.
No picture or no sound.	Either the picture or the sound is cut off.	Press the MUTING key to cancel the muting function *(see page 7 (GB))*.
The picture is noisy.	Noise may appear on the background depending on the combination of the numbers of dot input from the connector and numbers of pixel on the LCD panel.	Change the desktop pattern on the connected computer.
When inputting sound through the INPUT A/B/C connector, sound comes through one channel only.	Monaural sound is being input through the INPUT A/B/C connector.	Input stereo sound.
The picture from INPUT A/B/C connector is colored strange.	Setting for INPUT-A, INPUT-B or INPUT-C in the SIGNAL SELECT menu is incorrect.	Set INPUT-A, INPUT-B or INPUT-C in the SIGNAL SELECT menu correctly according to the input signal *(see page 34 (GB))*.
"Please check INPUT-A in SIGNAL SELECT" appears in spite of inputting the correct signal from INPUT A.	Setting for INPUT-A in the SIGNAL SELECT menu is incorrect.	Set INPUT-A in the SIGNAL SELECT menu correctly according to the input signal *(see page 34 (GB))*.
"Please check INPUT-B in SIGNAL SELECT" appears in spite of inputting the correct signal from INPUT B.	Setting for INPUT-B in the SIGNAL SELECT menu is incorrect.	Set INPUT-B in the SIGNAL SELECT menu correctly according to the input signal *(see page 34 (GB))*.
"Please check INPUT-C in SIGNAL SELECT" appears in spite of inputting the correct signal from INPUT C.	Setting for INPUT-C in the SIGNAL SELECT menu is incorrect.	Set INPUT-C in the SIGNAL SELECT menu correctly according to the input signal *(see page 34 (GB))*.
"NO INPUT" appears when 15k RGB or component signal is input.	The sync signal is incorrect.	Input the correct sync singal (composite sync or sync on G singal (sync on Y for component singal)).
On-screen displays do not appear.	STATUS in the SET SETTING menu is set to OFF.	Set STATUS in the SET SETTING menu to ON *(see page 33 (GB))*.
Color balance is not correct.	Picture has not been adjusted properly.	Adjust the picture *(see page 29 (GB))*.
	The color system of the input signal is not set correctly.	Set COLOR SYS in the PICTURE CTRL menu correctly to match the color system of the input signal *(see page 29 (GB))*.
The picture is too dark.	The lamp is nearing the end of its life.	Replace the lamp with a new one *(see page 39 (GB))*.
	Contrast or brightness has not been adjusted properly.	Adjust CONTRAST or BRIGHT in the PICTURE CTRL menu properly *(see page 29 (GB))*.
The picture is not clear.	The picture is out of focus.	Adjust the focus *(see page 27 (GB))*.
	Moisture condensation has occurred on the lens.	Leave the projector for about two hours with the power on *(see page 14 (GB))*.

Symptom	Cause	Remedy
The Remote Commander does not work.	The batteries are exhausted.	Replace the batteries with new ones *(see page 13 (GB))*.
	The remote control cable is connected to the Remote Commander although you are using it as a wireless Remote Commander.	Disconnect the remote control cable.
	The fluorescent lamp influences on the Remote Commander detector.	Change the setting of SIRCS RECEIVER in the SET SETTING menu *(see page 33 (GB))*.
	You have selected a wrong index number.	Select the correct index number *(see pages 25 (GB) and 26 (GB))*.
	You have set the index number to "00".	Select the correct index number *(see pages 25 (GB) and 26 (GB))*.
The wireless Remote Commander does not function.	The SIRCS RECEIVER setting is not correct.	Change the setting of SIRCS RECEIVER in the SET SETTING menu *(see page 33 (GB))*.
INPUT A cannot be selected.	The switcher is not connected, but is recognized to be connected.	If the PJ COM connector is connected to something other than the terminator, remove it then press the SYS SET key, or the LIGHT and RESET keys on the control panel.
The COVER FAIL indicator lights.	The lamp cover or air filter cover is detached.	Attach the lamp cover or air filter cover securely *(see pages 39 (GB) – 41 (GB))*.
The LAMP FAIL indicator lights.	The lamp with the same number of the indicator has reached the end of its life.	Replace the lamp *(see page 40 (GB))*.
The FAN indicator lights.	The fan is broken.	Consult with qualified Sony personnel.
The HIGH TEMP indicator lights.	The internal temperature is unusually high.	Check to see if nothing is blocking the ventilation holes.
When you press the ZOOM, SHIFT or FOCUS key, "LENS CONTROL is locked! Do you wish to unlock ?" appears.	The lens control function is locked.	Consult with qualified Sony service personnel.

Caution messages

Use the list below to check the meaning of the messages displayed on the screen.

Message	Meaning	Remedy
High Temperature! Power off in 1 min.	Internal temperature becomes too high.	Turn off the power. (If not, the power is automatically turned off about one minute later.) Check to see if nothing is blocking the ventilation holes.
Frequency is out of range!	The frequency of the input signal is out of the acceptable range.	Input a signal that is within the range of the frequency.
Please check INPUT-A in SIGNAL SELECT.	You have input the RGB signal from the computer when INPUT-A in the SIGNAL SELECT menu is set to COMPONENT, DTV-GBR or DTV-YP$_B$P$_R$.	Set INPUT-A correctly.
Please check INPUT-B in SIGNAL SELECT.	You have input the RGB signal from the computer when INPUT-B in the SIGNAL SELECT menu is set to COMPONENT, VIDEO, S-VIDEO, DTV-GBR or DTV-YP$_B$P$_R$.	Set INPUT-B correctly.
Please check INPUT-C in SIGNAL SELECT.	You have input the RGB signal from the computer when INPUT-C in the SIGNAL SELECT menu is set to COMPONENT, VIDEO, S-VIDEO, DTV-GBR or DTV-YP$_B$P$_R$.	Set INPUT-C correctly.

Specifications

Optical characteristics

Projection system	3 LCD panels, 1 lens, 3-primary color optical shutter system
LCD panel	1.8-inch SXGA LCD panel, 3,932,160 pixels (1,310,720 pixels × 3)
Lens	Option
Light output	ANSI lumen[1] 3,500 lm
Lamp	120 W UHP × 4

Electrical characteristics

Color system	NTSC$_{3.58}$/PAL/SECAM/NTSC$_{4.43}$/PAL-M system, switched automatically
Resolution	600 horizontal TV lines (video input) 1280 × 1024 dots (RGB input)
Acceptable computer signal	fH: 15 to 100 kHz fV: 40 to 120 Hz
Speakers	Max. 5 W + 5 W, 90 × 50 mm (3 5/8 × 2 inches), stereo

Input/Output

CONTROL S	IN/PLUG IN POWER: Stereo minijack, 5 Vp-p, plug in power, DC 5 V, maximum output 60 mA OUT: Stereo minijack, 5 Vp-p
REMOTE RS-232C/422A	D-sub 9-pin (female) *(For details, see "Pin assignment" on page 46 (GB).)*
PJ COM	IN: D-sub 9-pin (male) OUT: D-sub 9-pin (female) *(For details, see "Pin assignment" on page 46 (GB).)*
TRIG	Minijack Power on: DC 12 V, output impedance: 4.7 kilohms Power off: 0 V
S VIDEO (priority to Y IN/C IN) (only for VPL-FE100U/FE100M)	IN: Mini DIN 4-pin type (male) Y (luminance): 1 Vp-p ± 2 dB sync negative, 75 ohms terminated C (chrominance): Burst 0.286 Vp-p ± 2 dB (NTSC), 75 ohms terminated Burst 0.3 Vp-p ± 2 dB (PAL), 75 ohms terminated OUT: Loop-through mini DIN 4-pin type (male) Loop-through output from the S VIDEO IN connector Y IN: BNC type 1 Vp-p ± 2 dB sync negative, 75 ohms terminated C IN: BNC type Burst 0.286 Vp-p ± 2 dB (NTSC), 75 ohms terminated Burst 0.3 Vp-p ± 2 dB (PAL), 75 ohms terminated
VIDEO (only for VPL-FE100U/FE100M)	IN: BNC type Composite video, 1 Vp-p ± 2 dB sync negative, 75 ohms terminated OUT: Loop-through BNC type Loop-through output from the VIDEO IN connector
AUDIO IN (only for VPL-FE100U/FE100M)	Phono type (stereo) 500 mVrms, impedance more than 47 kilohms
INPUT A	Analog RGB/component: BNC type R/R-Y: 0.7 Vp-p ± 2 dB positive, 75 ohms terminated G: 0.7 Vp-p ± 2 dB positive, 75 ohms terminated G with sync/Y: 1 Vp-p ± 2 dB sync negative, 75 ohms terminated B/B-Y: 0.7 Vp-p ± 2 dB positive, 75 ohms terminated SYNC/HD: Composite sync: 0.6–8 Vp-p, high impedance, sync positive/negative Horizontal sync: 0.6–8 Vp-p, high impedance, sync positive/negative VD: Vertical sync: 0.6–8 Vp-p, high impedance, sync positive/negative AUDIO IN: Phono type (stereo) 500 m Vrms, impedance more than 47 kilohms HDTV/DTV (YPBPR): BNC type Y: 1 Vp-p ± 2dB positive, 75 ohms terminated Tri-level sync: ± 0.3 Vp-p Bi-level sync: 0.3 Vp-p PB/PR: 0.35 Vp-p ± 2dB positive, 75 ohms terminated HDTV/DTV (GBR): BNC type G with sync: 1 Vp-p ± 2 dB, 75 ohms terminated Tri-level sync: ± 0.3 Vp-p Bi-level sync: 0.3 Vp-p B/R: 0.7 Vp-p ± 2dB positive, 75 ohms terminated *(For HDTV/DTV signals see "Acceptable HDTV/DTV formats" on page 46 (GB).)*
AUDIO OUT (variable out)	Phono type, Max. 1 Vrms When input is 500 mVrms: impedance less than 5 kilohms
Safety regulations	VPL-FE100U: UL1950, CSA No. 950 (c-UL), FCC Class A, IC Class A VPL-FE100E/FE100M: EN60 950 (TÜV), CE, C-Tick

General

Dimensions	562 × 237 × 649 mm (22 1/4 × 9 3/8 × 25 5/8 inches) (w/h/d)
Mass	Approx. 34.5 kg (76 lb 1 oz) (excluding the optional lens)
Power requirements	VPL-FE100U: AC 100 to 120 V/220 to 240 V, 50/60 Hz[1] VPL-FE100E/FE100M: AC 220 to 240 V, 50/60 Hz
Power consumption	Approx. 770 W (Standby mode: 15W for VPL-FE100U, 20 W for VPL-FE100E/FE100M)
Heat dissipation	2628 BTU
Operating temperature	0°C to 40°C (32°F to 104°F)
Operating humidity	35% to 85% (no condensation)
Storage temperature	–20°C to +60°C (–4°F to +140°F)
Storage humidity	10% to 90%
Supplied Accessories	Remote Commander RM-PJ1001 (1) Size AA (R6) batteries (3) Remote commander cable (stereo) (15 m) (1) AC power cord (1) Terminator for the PJ COM connector (1) Lens ring (1) Operating Instructions (1) Installation Manual for Dealers (1) Warranty (only for VPL-FE100U) (1)

Design and specifications are subject to change without notice.

Optional accessories

Projector Lamp LMP-Q120 (for replacement)
Projector Lamp LMP-S120 (for replacement)
Interface Board
  IFB-12A (Analog RGB/component/HDTV/composite video/S video input with 5BNC type connectors)
  IFB-20 (Analog RGB input with D-sub 9-pin type connector)
  IFB-21 (Analog RGB input/output with HD D-sub 15-pin type connector)
  IFB-30 (Digital RGB input with D-sub 9-pin type connector)
  IFB-50 (serial digital video input/output with BNC type connector)
  IFB-1000 (Composite video input with BNC type connector/S video input with mini DIN 4-pin type connector)
  IFB-X2000E (Composite video input with phono jacks/S video input with mini DIN 4-pin type connector) (only for VPL-FE100E)
Signal Interface Switcher PC-3000
Interface Unit IFU-1271/1271M
SIC Cable
  SIC-10/20A/20C/21/22/23/24/24A/25/26/26A/30/31/M1/M5/M15/M25/M50
9-pin remote cable (for PJ COM)
  RCC-5G/10G/30G

---

1) ANSI lumen is a measuring method of American National Standard IT 7.228.

1) UL listed for 120 V operation.

Specifications

Monitor Cable
- SMF-400 (HD D-sub 15-pin (female) ←→ 5BNC (female))
- SMF-401 (HD D-sub 15-pin (female) ←→ HD D-sub 15-pin (female))

Signal Adapter
- ADP-10 (D-sub 9-pin ←→ HD D-sub 15-pin (for SIC Cable))
- ADP-20 (Macintosh ←→ VGA)

Remote Commander RM-PJ3000S

Remote Control Receiver RM-PJ10

Projection Lens
- Fixed short focus lens VPLL-2009
- Fixed short focus lens VPLL-2014
- 1.3-times zoom standard focus lens VPLL-Z3020
- 1.6-times zoom long focus lens VPLL-Z2025
- 1.5-times zoom long focus lens VPLL-Z2039
- Fixed long focus lens VPLL-3050
- Fixed long focus lens VPLL-2075
- 1.3-times zoom standard focus lens VPLL-Z2019

Projector Stand SU-PJ2000 (for stacking)

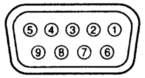
Projector Suspension Support PSS-2000

Screens
- VPS-80FH (80-inch, flat)
- VPS-100FH (100-inch, flat)
- VPS-120FH (120-inch, flat)

Some of the items may not be available in some areas. For details, please consult your nearest Sony office.

Pin assignment

RS-232C/422A connector (D-sub 9-pin, female)



RS-232C

1	NC		6	DSR*	Data Set Ready
2	RD	Receive Data	7	RTS**	Request to Send
3	TD	Transmit Data	8	CTS**	Clear to Send
4	DTR*	Data Terminal Ready	9	NC	
5	GND	Ground			

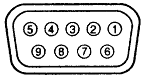
* Circuit between pins 4 and 6 is short-circuited in the projector.

** Circuit between pins 7 and 8 is short-circuited in the projector.

RS-422A

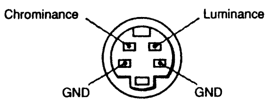
1	GND	Ground	6	GND	Ground
2	$\overline{\text{TX}}$	Transmit	7	TX	Transmit
3	RX	Receive	8	$\overline{\text{RX}}$	Receive
4	GND	Ground	9	GND	Ground
5	NC				

PJ COM connector (D-sub 9-pin, female)



1	GND	Ground	6	GND	Ground
2	$\overline{\text{BUSY}}$	Busy	7	BUSY	Busy
3	TX/RX	Tramsmit/ Receive	8	$\overline{\text{TX/RX}}$	Tramsmit/ Receive
4	GND	Ground	9	GND	Ground
5	NC				

S VIDEO connector (mini DIN 4-pin)



Acceptable HDTV/DTV formats

Format	Scanning rate (kHz)	Frame rate (Hz)*	Scanning format	Aspect ratio	Standard
1035/60i	33.75	30	2:1 interlace	16:9	BTA S-001B
1080/60i	33.75	30	2:1 interlace	16:9	SMPTE 274M/ BTA S-001B
480/60P	31.5	60	Progressive	16:9/4:3	SMPTE 293M
575/50P	31.25	50	Progressive	16:9/4:3	–
1080/48i	27	24	2:1 interlace	16:9	–
1080/50i	28.13	25	2:1 interlace	16:9	SMPTE 274M
720/60P	45	60	Progressive	16:9	SMPTE 293M
720/50P	37.5	60	Progressive	16:9	–

* Each of the frame rates is also compatible with 1/1.001.

Index

A

Adjusters 5 (GB)
Adjusting
  picture 27 (GB)
  picture size/shift 30 (GB)
  zoom 27 (GB)
Air filter 41 (GB)
ASPECT 30 (GB)
Attaching the lens 16 (GB)
AUDIO MUTING 7 (GB)

B

Battery
  Installation 13 (GB)
  notes 13 (GB)
BLANKING 30 (GB)
BNC connector 18 (GB)
BRIGHT 29 (GB)

C

Carrying handles 6 (GB)
Caution messages 43 (GB)
COLOR 29 (GB)
COLOR SYS (System) 29 (GB)
COLOR TEMP 29 (GB)
Connections
  active speakers 18 (GB)
  BNC connector 18 (GB)
  computer 18 (GB)
  multiple projectors 22 (GB)
  15k RGB/component equipment 19 (GB)
  Remote Commander 13 (GB)
  switcher 20 (GB)
  VCR 18 (GB)
CONTRAST 29 (GB)
Cut off
  the picture 7 (GB)
  the sound 7 (GB)

D, E

D. (Dynamic) PICTURE 29 (GB)
Device index 25 (GB), 26 (GB), 33 (GB)
DOT PHASE 30 (GB)

F

fH (Horizontal frequency) 36 (GB)
FOCUS 27 (GB)
fV (Vertical frequency) 36 (GB)

G

GAMMA MODE 29 (GB)
Group index 25 (GB), 26 (GB), 33 (GB)

H

Handle lever 6 (GB)
H FILTER 30 (GB)
HIGH 38 (GB)
HUE 29 (GB)

I, J, K

INPUT-A 34 (GB)
INPUT-B 34 (GB)
INPUT-C 34 (GB)
INPUT MEMORY No. 31 (GB)
INPUT SETTING menu 30 (GB)
Input signal selection 8 (GB)

L

Lamp replacement 39 (GB)
LAMP TIMER 36 (GB)
LANGUAGE 33 (GB)
LENS CONTROL 37 (GB)
Location and function of controls
  control panel 7 (GB)
  front 5 (GB)
  rear 9 (GB)
  Remote Commander 11 (GB)
LOW 38 (GB)

M, N

Menu
  Clearing the menu display 28 (GB)
  INPUT SETTING menu 30 (GB)
  PICTURE CTRL menu 29 (GB)
  SET SETTING menu 33 (GB)
  SIGNAL SELECT menu 34 (GB)
  Using the menu 28 (GB)
Moisture condensation 14 (GB)

O

ON DELAY 37 (GB)
On-screen messages 43 (GB)
OPERATION TIMER 36 (GB)
Optional accessories 45 (GB)

P, Q

PC-3000 Signal Interface Switcher 20 (GB)
PIC MUTING 7 (GB)
PICTURE CTRL menu 29 (GB)
PICTURE SHIFT 30 (GB)
Pin assignment 46 (GB)
PJ COM 37 (GB)
PJ COM connector 20 (GB)
Power
  turn off 7 (GB)
  turn on 7 (GB)
POWER SAVING 33 (GB)
Precautions 3 (GB)
Precautions on installation 14 (GB)

R

Remote Commander
  battery installation 13 (GB)
  connecting to the projector 13 (GB)
  location and function of controls 11 (GB)
  notes 13 (GB)
Remote control (SIRCS) detector
  front 5 (GB)
  rear 8 (GB)
Reset
  resetting the item 28 (GB)
Restoring the USER MODE 38 (GB)
RS-232C/422A 37 (GB)
RS-232C/422A connector 10 (GB)

S

SAVE TO MEMORY 38 (GB)
SCAN CONV 30 (GB)
Screen size 15 (GB)
SERVICE mode
  entering into the SERVICE mode 35 (GB)
SERVICE MODE menu
  INFORMATION menu 35 (GB)
  SERVICE SETTING menu 37 (GB)
  W/B ADJUST menu 38 (GB)
SET SETTING menu 33 (GB)
SHARP 29 (GB)
SHIFT 30 (GB)
SIGNAL SELECT menu 34 (GB)
SIRCS RECEIVER 33 (GB)
SIZE 30 (GB)
SPEAKER 33 (GB)
Specifications 44 (GB)
STATUS (on-screen display) 33 (GB)
Supplied accessories 45 (GB)
SYNC 36 (GB)

T, U, V

Troubleshooting 42 (GB)
Type of screen 15 (GB)

W, X, Y

W/B ADJUST 38 (GB)

Z

ZOOM 27 (GB)

SONY

3-865-115-11 (1)

Interface Board

Operating Instructions

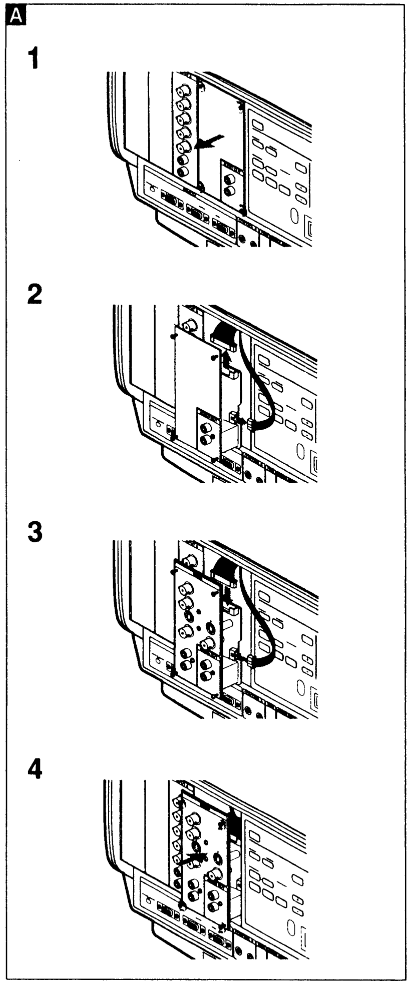
IFB-X2000E

Sony Corporation © 1998 Printed in Japan

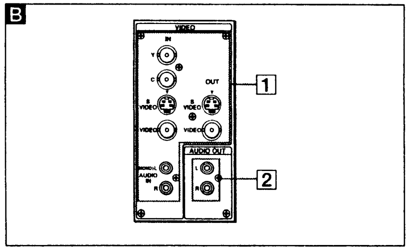
Sony online http://www.world.sony.com/

Printed on recycled paper

A



B



English

The IFB-X2000E interface board is designed to be mounted on Sony VPL-X2000E LCD data projectors so that composite video or S video (Y/C) signals and audio signals from video equipment can be input/output.

Mounting the IFB-X2000E A

Before installing the board, be sure to turn off the power of the projector and disconnect the projector power cable from the wall outlet.

1 **Pull out the AUDIO OUT plate on the rear of the projector by loosening the four screws with a screwdriver.**
2 **Disconnect the 12-pin and 4-pin cable connectors from the AUDIO OUT plate to remove the plate.**
3 **Insert the two connectors into the connector plugs on the interface board.**
4 **Insert the interface board into the rear panel of the projector.**

Caution

Make sure that the wire is not caught between the opening of the projector and the board.

5 **Tighten the four screws on the interface board.**

Location and Function of Parts B

1 **VIDEO connectors**

Y IN/C IN (BNC-type): Connect to the Y and C video outputs of the video equipment.

S VIDEO IN (mini DIN 4-pin): Connects to the Y/C video output of the video equipment.

S VIDEO OUT (mini DIN 4-pin): Used as loop-through output via the Y/C IN connectors or the S VIDEO IN connector.

VIDEO IN (BNC type): Connects to the composite video output connector of the video equipment.

VIDEO OUT (BNC type): Used as loop-through output of the VIDEO IN connector.

AUDIO IN L (MONO)/R jacks (phono type): Connect to the audio output jacks of equipment, such as a VCR, etc. For stereo equipment, use both the L and R jacks; for monaural equipment, use the L (MONO) jack only.

Note

If you have video equipment connected to both the Y/C IN and S VIDEO IN connectors, the signal from the Y/C IN connectors are selected prior to the S VIDEO IN connector. When projecting video connected to the S VIDEO IN connector, be sure not to connect any cable to the Y/C IN connectors.

2 **AUDIO OUT L/R jacks (phono type)**

Connect to external active speakers. The volume of the speakers can be controlled by the VOLUME keys of the projector.

Specifications

S VIDEO (priority to Y IN/C IN)
IN: Mini DIN 4-pin type (male)
Y (luminance): 1 Vp-p ± 2 dB sync negative, 75 ohms terminated
C (chrominance): Burst 0.286 Vp-p ± 2 dB (NTSC), 75 ohms terminated
Burst 0.3 Vp-p ± 2 dB (PAL), 75 ohms terminated
OUT: Loop-through mini DIN 4-pin type (male), Loop-through output from the S VIDEO IN connector
Y IN: BNC type, 1 Vp-p ± 2 dB sync negative, 75 ohms terminated
C IN: BNC type, Burst 0.286 Vp-p ± 2 dB (NTSC), 75 ohms terminated, Burst 0.3 Vp-p ± 2 dB (PAL), 75 ohms terminated

VIDEO
IN: BNC type, Composite video, 1 Vp-p ± 2 dB sync negative, 75 ohms terminated
OUT: Loop-through BNC type, Loop-through output from the VIDEO IN connector

AUDIO IN
Phono type (stereo), 500 mVrms, impedance more than 47 kilohms

AUDIO OUT (variable out)
Phono type, Max. 1 Vrms, When input is 500 mVrms: impedance less than 5 kilohms

Design and specifications are subject to change without notice.

SONY

3-865-453-01(1)

Projector
Suspension Support

Installation manual for Dealers

Operating Instructions
Before operating the unit, please read this manual thoroughly and retain it for future reference.

TÜV Rheinland
BAUART GEPRÜFT
TYPE APPROVED

PSS-2000

© 1998 by Sony Corporation

English

Maximum load: 50 kg (110 lb 6 oz)

The PSS-2000 suspension support is designed for use with Sony LCD Data projectors the VPL-X2000U/E/M.

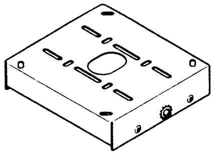
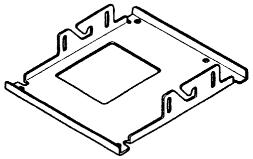
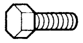
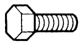
Caution

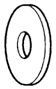
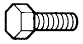
- For installation, consult with qualifies Sony personnel.
- The ceiling should be capable of supporting a weight of at least 250 kg (551 lb 2 oz); if not, the ceiling must be reinforced.
- When you attach the bracket directly to the ceiling, use commercially available M10 bolts with nuts and washers, depending on the ceiling. Use of other bolts, nuts, and washers other than M10 may present a danger of falling.
- Be sure to assemble and attach the bracket in the order indicated; otherwise the projector may fall, resulting in grievous bodily injury or even death.
- The PSS-2000 suspension support is designed for use with Sony LCD data projector. Never use it for another purpose.

Table of contents

Parts List 6
Installation Diagram 8
Attaching to the Ceiling 12
Installation Examples 16
Specifications 22

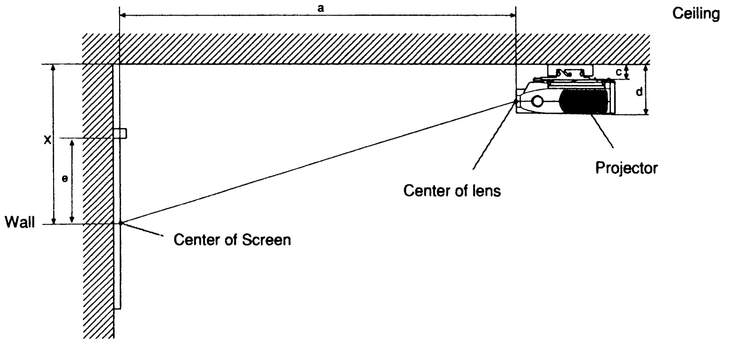
Parts List

(a)	Base box (1)		
(b)	Suspension bracket (1)		
(c)	Bolt M8 × 20 (2)	Parts number 4-047-766-01	
(d)	Bolt M6 × 12 (4)	Parts number 4-056-754-01	
(e)	Washer M8 (2)	Parts number 4-047-748-01	
(f)	Washer M6 (4)	Parts number 4-056-755-01	

(g)	Spacer (2)	Parts number 4-056-753-01	
(h)	Bolt M10 × 25 (4)	Parts number 4-068-372-01	
(i)	Washer M10 (4)	Parts number 4-068-371-01	
(j)	Spring washer M10 (4)	Parts number 4-068-373-01	

Installation Diagram

For details of screen size and installation measurement for projection, refer to the Operating Manual or Installation Manual for Dealers of the projector.



a: Distance between the center of lens and the screen

c: Distance between the ceiling and the mounting surface of the suspension bracket: 104.7 mm (4 1/8 inches)

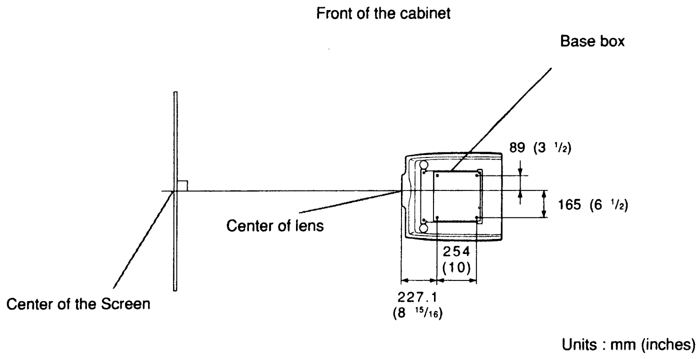
d: Distance between the top of the projector and the ceiling: 330.3 mm (13 inches)

e: Distance from the top edge of available projected picture to the center of screen

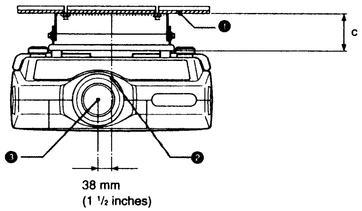
x: Distance between the ceilig and the center of the screen

Installation Diagram

Align the center of the lens with the center of the screen.


Front of the cabinet
Base box
89 (3 1/2)
165 (6 1/2)
Center of lens
254
(10)
227.1
(8 15/16)
Center of the Screen
Units : mm (inches)

The lens is offset 38 mm (1 1/2 inches) to the left from the center of the projector. When mounting, take care to align the center of the lens with the center of the screen; not the center of the projector.


➊
➋
➌
c
38 mm
(1 1/2 inches)

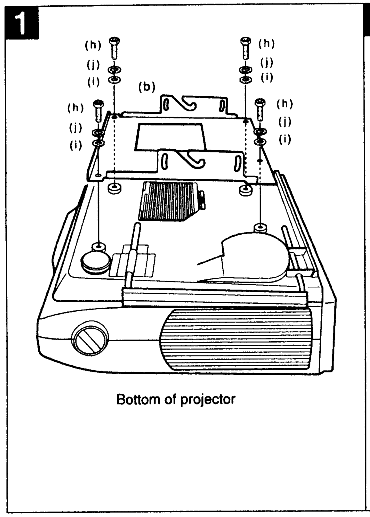
c: Distance between the ceiling and the mounting surface of the suspension bracket: 104.7 mm (4 1/8 inches)

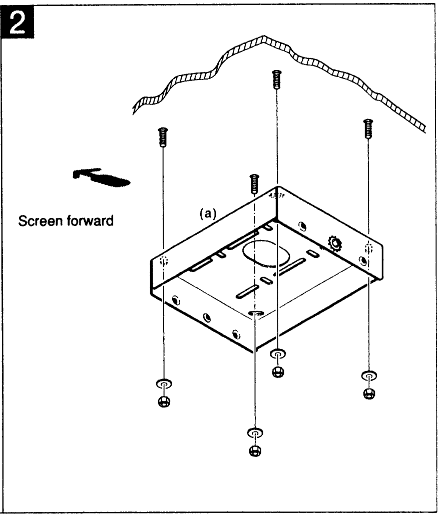
➊ Ceiling

➋ Center of projector

➌ Center of lens

Attaching to the Ceiling





English

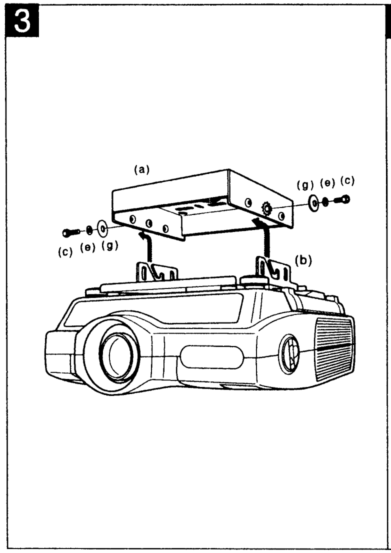
1 Turn the projector upside down and attach the suspension bracket (b).
Use M10 × 25 bolts (h), M10 spring washers (j) and M10 washers (i).

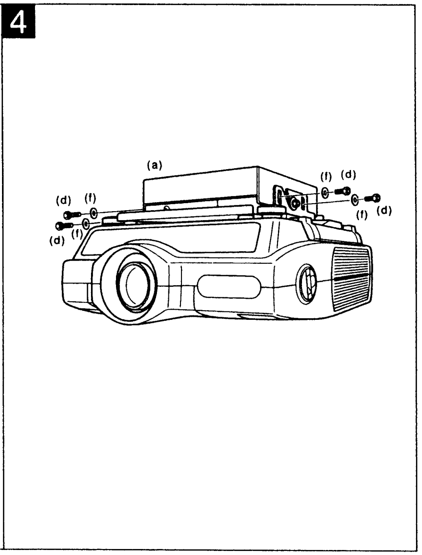
Note

When attaching the bracket, be careful not to overtighten the bolts.

2 Attach the base box (a) to the ceiling.
Use M10 bolts, nuts and washers (not supplied).

Attaching to the ceiling





English

3 Tighten loosely two bolts M8 × 20 (c), washers (e) and spacers (g) to the base box hinge pins (a). Hang the projector with the suspension bracket (b) on the base box hinge pins (two bolts M8 × 20 (c)).

4 Attach four bolts M6 × 12 (d) and washers M6 (f), tighten all bolts M6 × 12 (d) (angle holding) and two bolts M8 × 20 (c) (attached in step 3) to secure the projector to the screen angle.

5 After having secured the projector, adjust the position of the screen and projected image using SHIFT function of the projector.

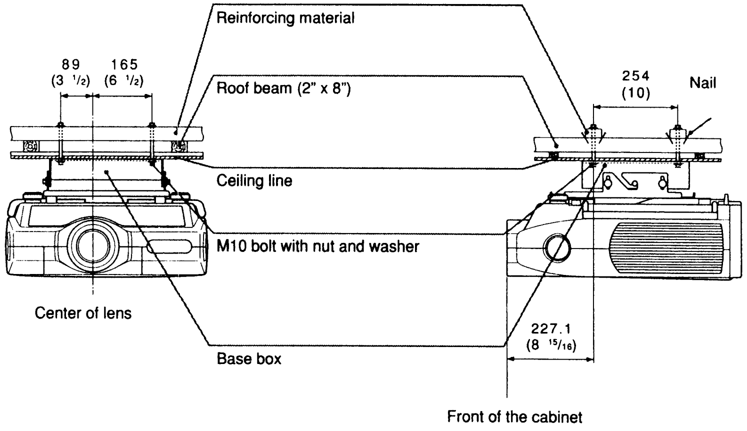
Installation Examples

The following illustrations show the projector suspension support attached to with the ceiling. Installation is different depending on the material of ceiling.

Caution

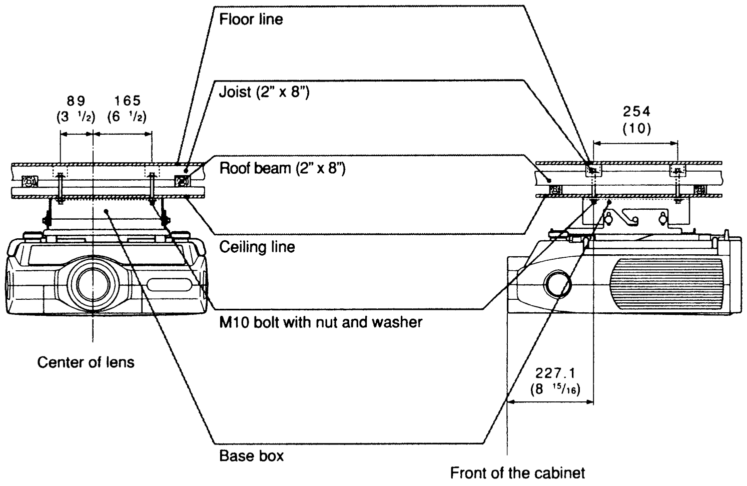
Before installation, check that the maximum ceiling loading is in excess of 250 kg (551 lb 2 oz).

For-one-story house or uppermost floor


Reinforcing material
89
(3 1/2)
165
(6 1/2)
Roof beam (2" x 8")
254
(10)
Nail
Ceiling line
M10 bolt with nut and washer
Center of lens
Base box
227.1
(8 15/16)
Front of the cabinet

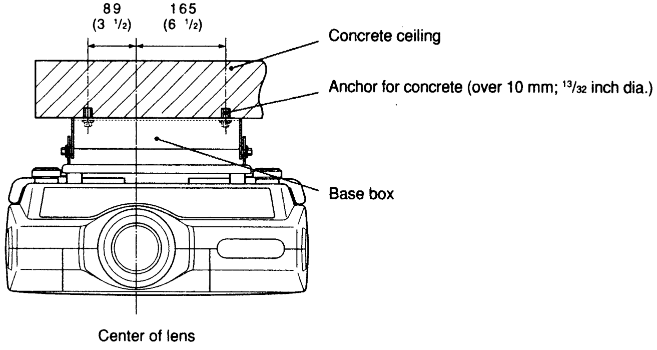
Units : mm (inches)

Installation Examples

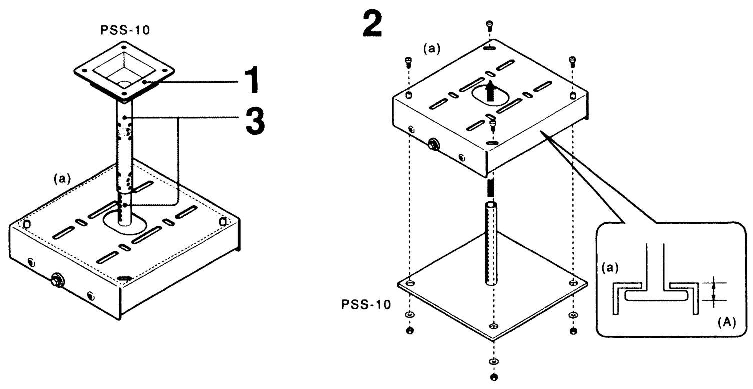

89
(3 1/2)
165
(6 1/2)
Floor line
Joist (2" x 8")
Roof beam (2" x 8")
Ceiling line
M10 bolt with nut and washer
Center of lens
Base box
254
(10)
227.1
(8 15/16)
Front of the cabinet

Units : mm (inches)

Place bolts at least 100 mm (4 inches) away from wall.


89
(3 1/2)
165
(6 1/2)
Concrete ceiling
Anchor for concrete (over 10 mm; 13/32 inch dia.)
Base box
Center of lens

Installation Examples


PSS-10
1
3
(a)
2
(a)
PSS-10
(a)
(A)

English

1 Attach the upper part of the PSS-10 to the ceiling. (See the PSS-10 installation manual for details.)

2 Insert the lower part of the PSS-10 into the hole in the base box and secure them using the M10 bolts, M10 washers, and M10 nuts supplied with the PSS-10.

3 Adjust the length and secure the upper and lower parts of the PSS-10. (See the PSS-10 installation manual for details.)

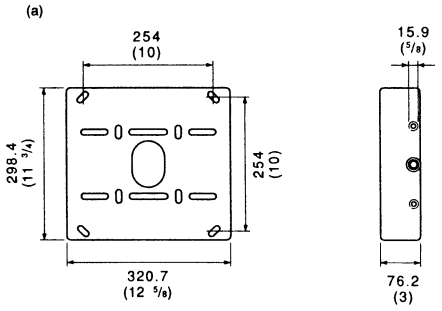
Note

The distance between the projector and the ceiling will be decreased by 5.5 mm (7/32 inch) (A) from the installation measurements of the PSS-10 when the PSS-2000 and the PSS-10 are used together.

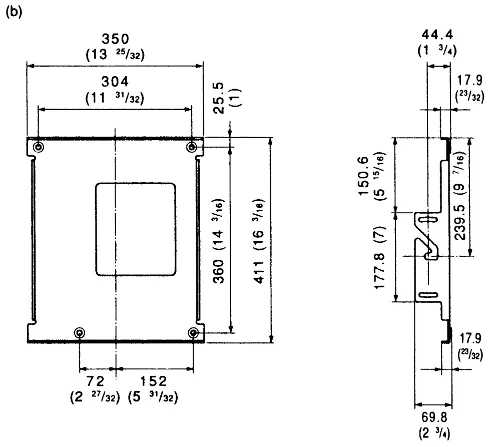
Specifications

Dimensions

Base box


(a)
254
(10)
298.4
(11 3/4)
254
(10)
320.7
(12 5/8)
15.9
(5/8)
76.2
(3)

Suspension bracket


(b)
350
(13 25/32)
304
(11 31/32)
25.5
(1)
360 (14 3/16)
411 (16 3/16)
72
(2 27/32)
152
(5 31/32)
44.4
(1 3/4)
17.9
(23/32)
150.6
(5 15/16)
177.8 (7)
239.5 (9 7/16)
17.9
(23/32)
69.8
(2 3/4)

Units : mm (inches)

[redacted]

Mass : Approx. 5.5 kg (12 lb 2 oz)
Loading: Maximum 50 kg (110 lb 4 oz)

Design and specifications are subject to change without notice.

SONY

3-865-454-01(1)

Projector Stand

Installation manual

TÜV Rheinland
BAUART GEPRÜFT
TYPE APPROVED

SU-PJ2000

© 1998 by Sony Corporation

Table of contents

English

Overview 6
Parts List 8
Installation Diagram 9
Installation 10
Aligning projectors.. 20
Specifications 44

Overview

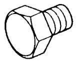
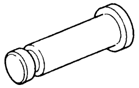
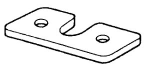
English

Maximum load of one projector stand: Up to 50 kg (110 lb 4 oz) per projector

The SU-PJ2000 projector stand is designed for use with Sony LCD data projector VPL-FE100U/E/M. You can stack up to three stands.

Caution
You can attach only one projector to one projector stand.

Parts List

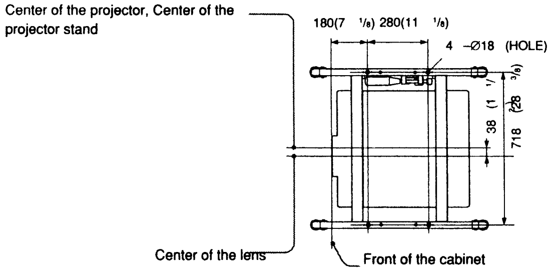
		Parts number	
(a)	**Screw M6 × 14 (8)**	4-068-381-01	
(b)	**Screw M10 × 20 (4)**	4-068-379-01	
(c)	**Shaft stack (4)**	4-068-383-01	
(d)	**Bracket stack (4)**	4-068-382-01	
(e)	**Flat washer M10 (4)**	4-068-378-01	
(f)	**Spring washer M10 (4)**	4-068-380-01	

Installation Diagram

For details of screen size and installation measurement for projection, refer to the Installation Manual of the projector.

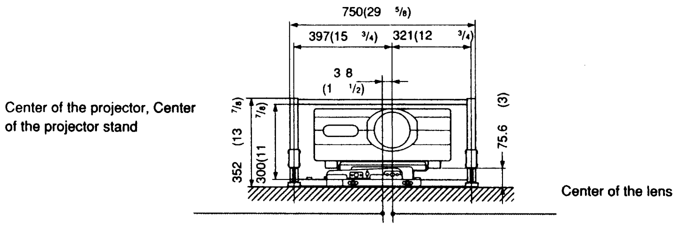
Top view

Unit : mm (inches)

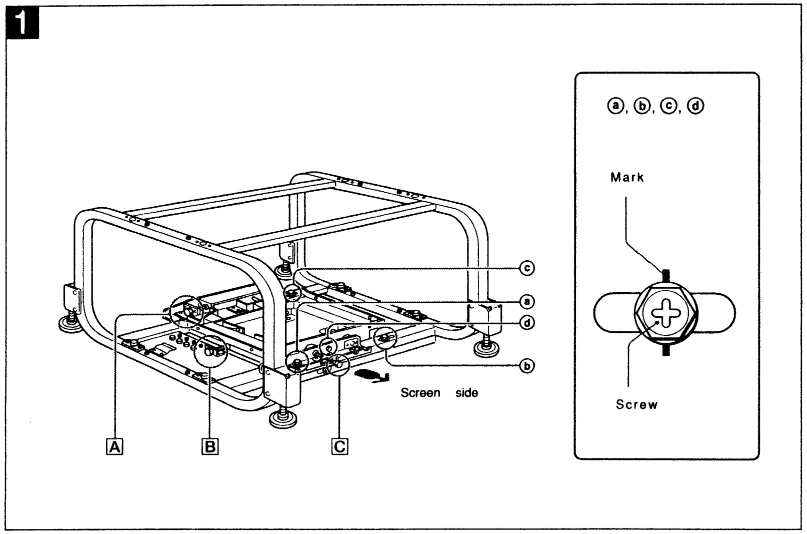

Center of the projector, Center of the projector stand
180(7 1/8) 280(11 1/8)
4 -Ø18 (HOLE)
38 (1 1/2)
718 (28 3/8)
Center of the lens
Front of the cabinet

Front view

Unit : mm (inches)


750(29 5/8)
397(15 3/4) 321(12 3/4)
3 8 (1 1/2)
Center of the projector, Center of the projector stand
352 (13 7/8)
300(11 7/8)
75.6 (3)
Center of the lens

Installation



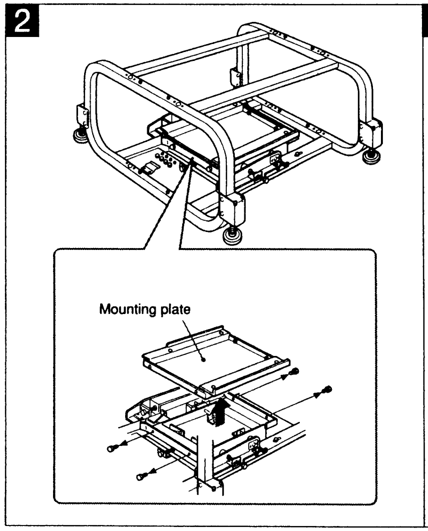
English

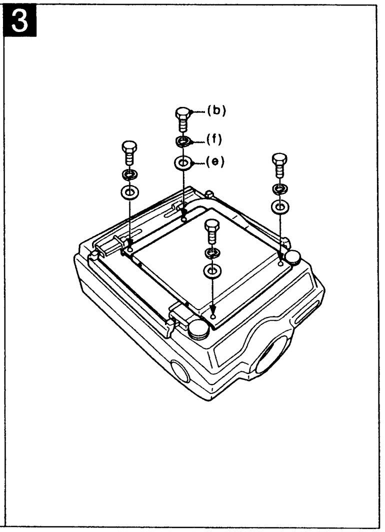
Attaching the projector to the projector stand

1 Loosen the screws ⓐ, ⓑ, ⓒ, ⓓ, and be sure that the each screw is positioned to the mark line.
To move the screws to the correct position, turn the knobs [A], [B], [C].

To move screw ⓐ: turn the knob [A].
To move screws ⓑ, ⓒ: turn the knob [B].
To move screw ⓓ: turn the knob [C].

(Continued)





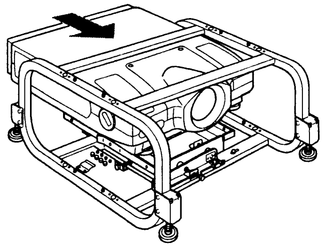
English

2 Remove the mounting plate from the projector stand.
Remove the screws (4) with the Phillips head screwdriver.

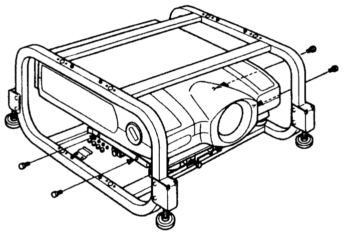
3 Turn over the projector, then turn over the mounting plate and attach it to the projector aligning the projections of the mounting plate with the holes of the projector.
Fix the plate with the supplied screw M10 × 20 (b) (4), flat washer M10 (e) (4) and spring washer M10 (f) (4) by using the wrench attached to the stand.

(Continued)

4



5

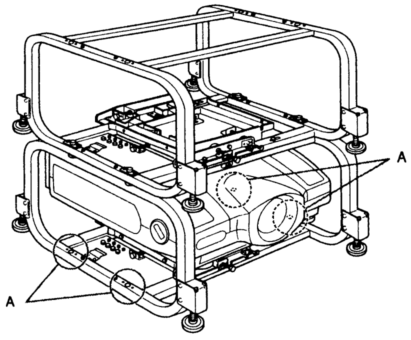


English

4 Re-position the projector with the mounting plate attached so that it faces in the original direction. Then, slide the projector into the tray of the projector stand from the rear, using the guides.

5 Slide the projector in until the mounting plate stops (foremost position).
Use the screws (4) removed in step **2**.

2



English

Stacking the projector stand

You can stack up to three SU-PJ2000 projector stands.

1 Put the 1st projector stand with the projector at the place they are to be used.
Place the stand on a flat surface facing the screen.

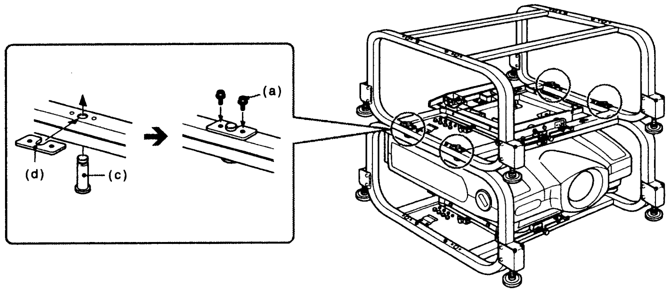
2 Display the HATCH pattern of the projector, adjust the horizontal and vertical positioning and fix the A (4) with the commercially available bolts (M14) and washers (M14).

3 Follow to the steps **1** to **3** of "Attaching the projector to the projector stand" (page 10) for 2nd and 3rd projectors.

4 Stack the 2nd projector stand on the 1st stand.

(Continued)

5



English

5 Fix the 1st and 2nd stands.
Insert the shaft stack (c) from the under side and fix the projector stand with the bracket stack (d). Fix the bracket stack with the supplied screws M6 × 14 (a) (8).

6 **Triple stack:** Stack the 3rd projector stand on the 2nd stand and fix them as step **5**.

7 Attach the projectors to the 2nd and 3rd projector stands.

Aligning projectors

English

Notes

- When adjusting with the Remote Commander, set a different index number on each projector, and designate the projector to be operated with the Remote Commander.
- For details on the following operations of the projector, see the Installation Manual for Dealers of the VPL-X2000U/E/M.
  - -Setting the index number.
  - -Entering into the service mode.
  - -Adjusting the picture.
  - -Adjusting the focus.
- Complete the adjustment on the 1st projector as the pictures of the 2nd and 3rd projectors are aligned with the picture of the 1st projector.

1 Press the ON key of the Remote Commander or the control panel for all projectors.
The ON indicator lights in green.

2 Enter into the SERVICE MODE for all projectors.

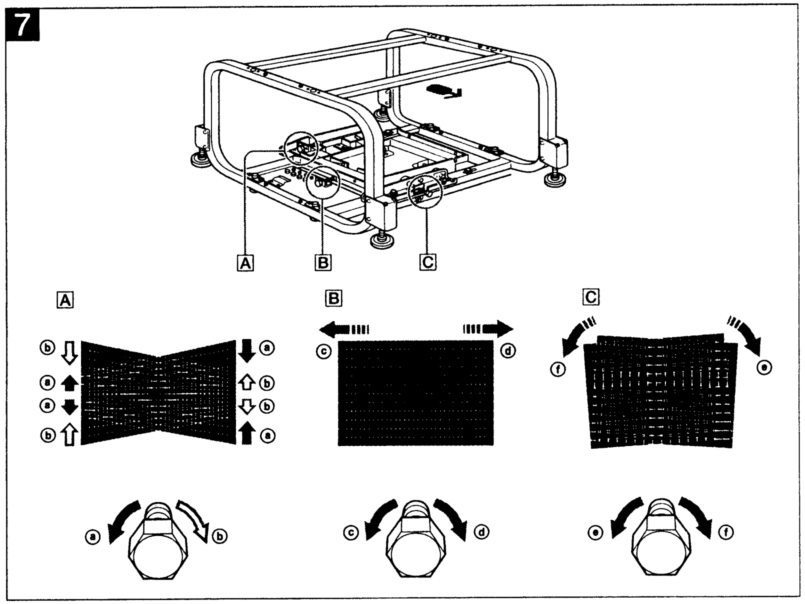
3 Put the lens cap on the 2nd and 3rd projectors or mute the picture by pressing the MUTING key.

4 Press the PATTERN key for the 1st projector on the Remote Commander or the control panel to display the HATCH pattern.

5 Adjust the focus with the FOCUS + or – key on the Remote Commander or the control panel.

6 Adjust the screen size using the ZOOM + or – key on the Remote Commander or the control panel, and adjust the vertical positioning using the SHIFT + or – key.

(Continued to page 24)



English

7 Adjust the picture precisely as follows.

🄰 Adjusting the vertical picture size
  ⓐ The left side of the picture is enlarged and right side is shortened, when the knob 🄰 is turned counterclockwise.
  ⓑ The right side of the picture is enlarged and left side is shortened, when the knob 🄰 is turned clockwise.

🄱 Adjusting the horizontal picture size (adjustment range is ±15 mm)
  ⓒ The picture moves leftward, when the knob 🄱 is turned counterclockwise.
  ⓓ The picture moves rightward, when the knob 🄱 is turned clockwise.

🄲 Adjusting the incline of the picture (adjustment range is ±2.5°)
  ⓔ The picture turns rightward, when the knob 🄲 is turned counterclockwise.
  ⓕ The picture turns leftward, when the knob 🄲 is turned clockwise.

(Continued to page 26)

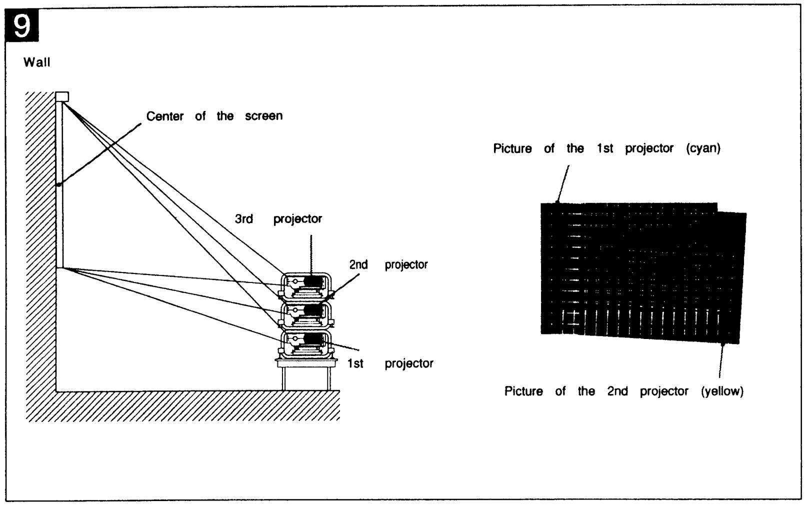
English

8 After completing the adjustment of the 1st projector, tighten the screws (4) of the 1st projector stand.

Notes

- If the HATCH pattern is not displayed properly on the screen, or is out of focus after the adjustments above, repeat steps **5** and **6** to adjust finely.
- Be sure not to readjust the 1st projector after completing the adjustments to it. When aligning all pictures, adjust the 2nd or 3rd projector to align its picture with that of the 1st projector.

(Continued to page 28)


9
Wall
Center of the screen
3rd projector
2nd projector
1st projector
Picture of the 1st projector (cyan)
Picture of the 2nd projector (yellow)

English

9 Remove the lens cap on the 2nd projector or release the muting by pressing the MUTING key.

10 Press the PATTERN key for the 1st projector on the Remote Commander or the control panel to display the HATCH pattern in cyan.

11 Press the PATTERN key for the 2nd projector on the Remote Commander or the control panel to display the HATCH pattern in yellow.

(Continued to page 30)

English

Align the picture of the 2nd projector with that of the 1st projector for the following adjustments. When both pictures are aligned correctly, the HATCH pattern is displayed in white.

12 Adjust the focus for the 2nd projector.

13 Adjust the picture size and the vertical positioning.

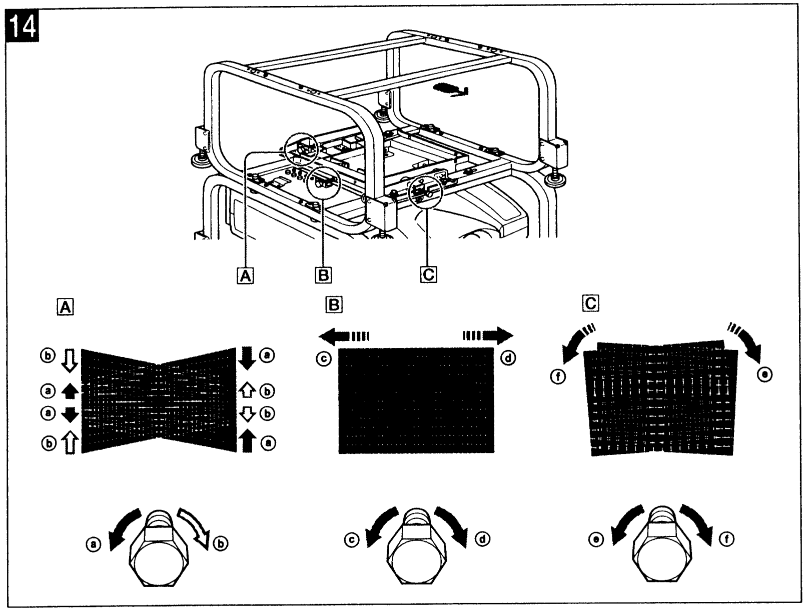
Picture size
Adjust it using the ZOOM + or – key on the Remote Commander or the control panel.

Vertical positioning
Adjust it using the SHIFT + or – key on the Remote Commander or the control panel.

Notes

- Be sure not to readjust the focus after aligning both pictures.
- Be sure not to readjust the 1st projector while adjusting the 2nd projector.

(Continued to page 34)



English

14 Adjust the picture precisely as follows.

🄰 Adjusting the vertical picture size
- ⓐ The left side of the picture is enlarged and right side is shortened, when the knob 🄰 is turned counterclockwise.
- ⓑ The right side of the picture is enlarged and left side is shortened, when the knob 🄰 is turned clockwise.

🄱 Adjusting the horizontal picture size (adjustment range is ±15 mm)
- ⓒ The picture moves leftward, when the knob 🄱 is turned counterclockwise.
- ⓓ The picture moves rightward, when the knob 🄱 is turned clockwise.

🄲 Adjusting the incline of the picture (adjustment range is ±2.5°)
- ⓔ The picture turns rightward, when the knob 🄲 is turned counterclockwise.
- ⓕ The picture turns leftward, when the knob 🄲 is turned clockwise.

(Continued to page 36)

English

15 **Triple stack:** Remove the lens cap from the 3rd projector or release the muting by pressing the MUTING key. Put the lens cap on the 2nd projector or mute the picture by pressing the MUTING key. Then press the PATTERN key for 3rd projector on the Remote Commander or the control panel to display the HATCH pattern in yellow.

16 Adjust the focus for 3rd projector aligning the picture of the 3rd projector with that of the 1st projector.

17 Adjust the picture size and the vertical positioning.

Picture size
Adjust it using the ZOOM + or – key on the Remote Commander or the control panel.

Vertical positioning
Adjust it using the SHIFT + or – key on the Remote Commander or the control panel.

18 Adjust the picture precisely as follows. (See page 34.)

🄰 Adjusting the vertical picture size
- ⓐ The left side of the picture is enlarged and right side is shortened, when the knob 🄰 is turned counterclockwise.
- ⓑ The right side of the picture is enlarged and left side is shortened, when the knob 🄰 is turned clockwise.

🄱 Adjusting the horizontal picture size (adjustment range is ±15 mm)
- ⓒ The picture moves leftward, when the knob 🄱 is turned counterclockwise.
- ⓓ The picture moves rightward, when the knob 🄱 is turned clockwise.

🄲 Adjusting the incline of the picture (adjustment range is ±2.5°)
- ⓔ The picture turns rightward, when the knob 🄲 is turned counterclockwise.
- ⓕ The picture turns leftward, when the knob 🄲 is turned clockwise.

(Continued to page 40)

English

19 After completing the adjustment, project the input signals from the 2nd and 3rd projectors, be sure to align the pictures. After that, tighten the screws (each 4).

20 Press the PATTERN keys for all projectors on the Remote Commander or the control panel to clear the HATCH pattern.

21 Project the input signals from all projectors.
If the projected pictures are not aligned properly, check the following and adjust the settings.

1 Make sure that all the settings in the INPUT SETTING menu are the same.

2 Adjust the DOT PHASE in the INPUT SETTING menu.

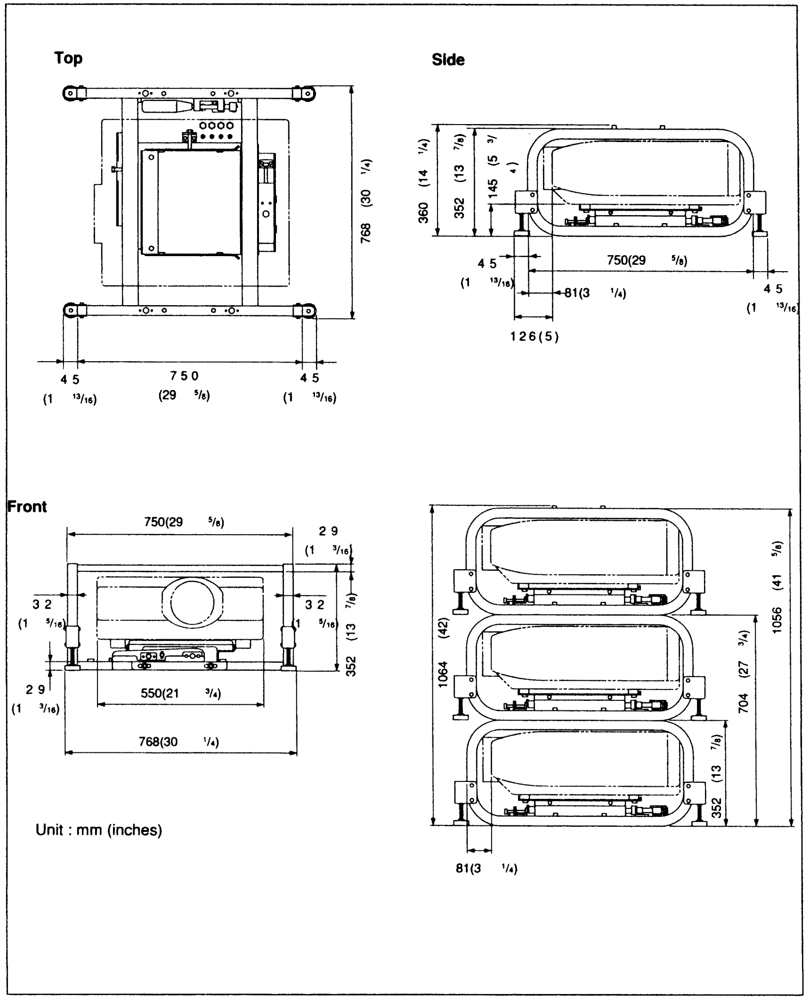
3 Adjust the H value of SHIFT in the INPUT SETTING menu.

Note

When adjusting one projector, put the lens cap on the other projector or mute the picture by pressing the MUTING key.

Specifications

Dimensions


Top
768 (30 1/4)
45 (1 13/16)
750 (29 5/8)
45 (1 13/16)
Side
360 (14 1/4)
352 (13 7/8)
145 (5 3/4)
45 (1 13/16)
750(29 5/8)
81(3 1/4)
45 (1 13/16)
126(5)
Front
750(29 5/8)
29 (1 3/16)
32 (1 5/16)
32 (1 5/16)
352 (13 7/8)
29 (1 3/16)
550(21 3/4)
768(30 1/4)
1064 (42)
704 (27 3/4)
1056 (41 5/8)
352 (13 7/8)
81(3 1/4)

Unit : mm (inches)

[redacted]

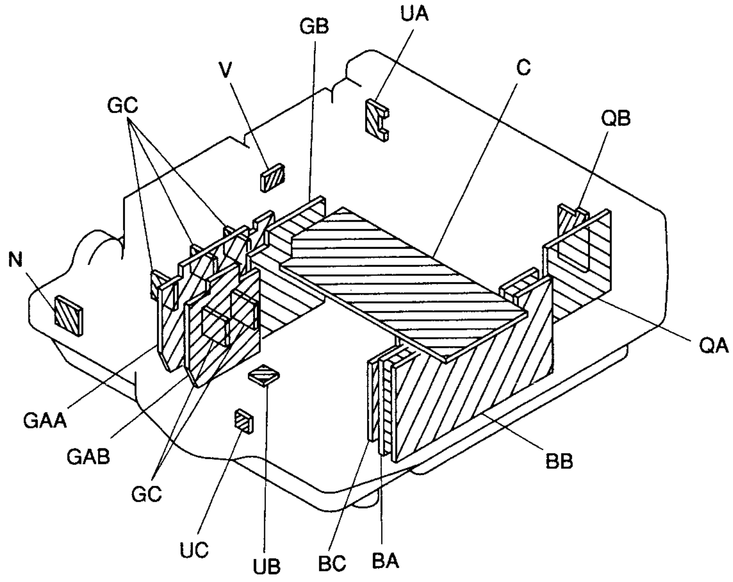
English

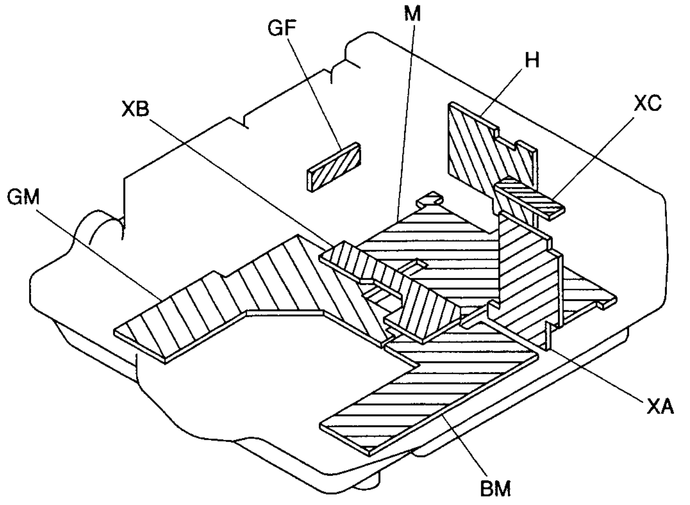
Mass	Approx. 32kg (70 lb 9 oz)
Maximum load of one projector stand	Up to 50 kg (110 lb 4 oz) per projector
Accessory	Screw M6 × 14 (8) Screw M10 × 20 (4) Shaft stack (4) Bracket stack (4) Flat washer M10 (4) Spring washer M10 (4) The eight spare bolts are attached on the lower tray of the projector stand. Use these spare bolts if necessary.

Design and specifications are subject to change without notice.

Section 2
Service Informations

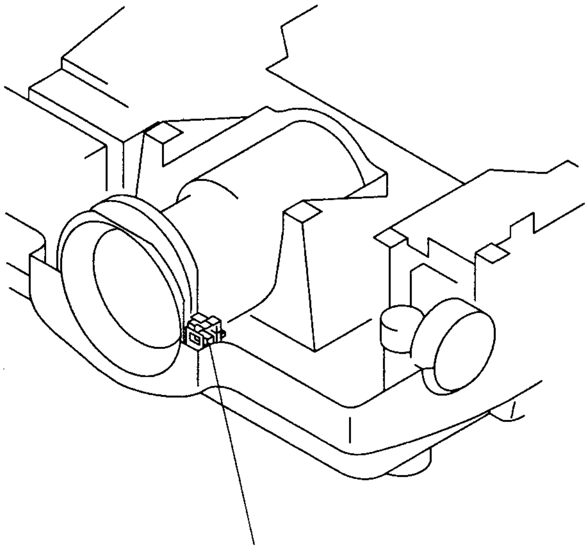
2-1. Circuit Boards Location


GB
UA
V
C
GC
QB
N
QA
GAA
GAB
BB
GC
UC
UB
BC
BA


GF
M
H
XB
XC
GM
XA
BM

2-2. Precautions on Electrical Measurements

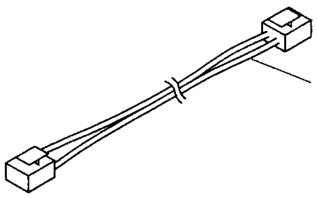
(1) A lens cover detection switch (UC board) is provided at the part for attaching the projection lens to prevent power from being supplied when the lens hood is disconnected. When performing electrical measurements with the lens hood open, fix the switch with adhesive tape and clear the protect so that power is supplied.
To attach the lens hood removed, be sure to remove the adhesive tape.



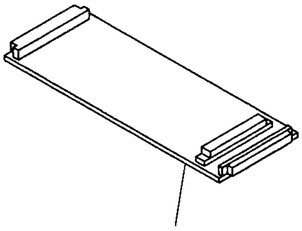
(2) When the C board is removed, various protect functions operate and no power is supplied. Before beginning electrical measurements, clear the protect functions.
①Connect Pin ㉚ (CVR-PRT-CB) and Pin ⑰ (SUB+5V) of CN4002 of the BC board using a 1 kΩ resistor.
②Connect Pin ⑪ (FAN PROT), Pin ⑯ (GND), Pin ⑫ (TEMP PROT), and Pin ⑨ of CN3602 of the BB board using wiring.

Be sure to disconnect them after completing measurements.

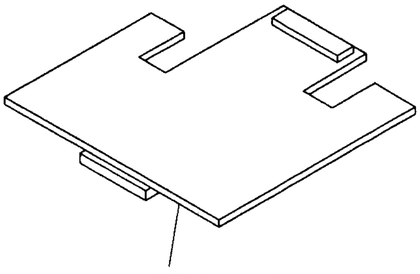
(3) Use the following servicing tools.



Cable (3pin) (1-900-244-53)
Use when inserting the following extension board / XE board (A-1501-122-A) into the GAA and GAB boards.

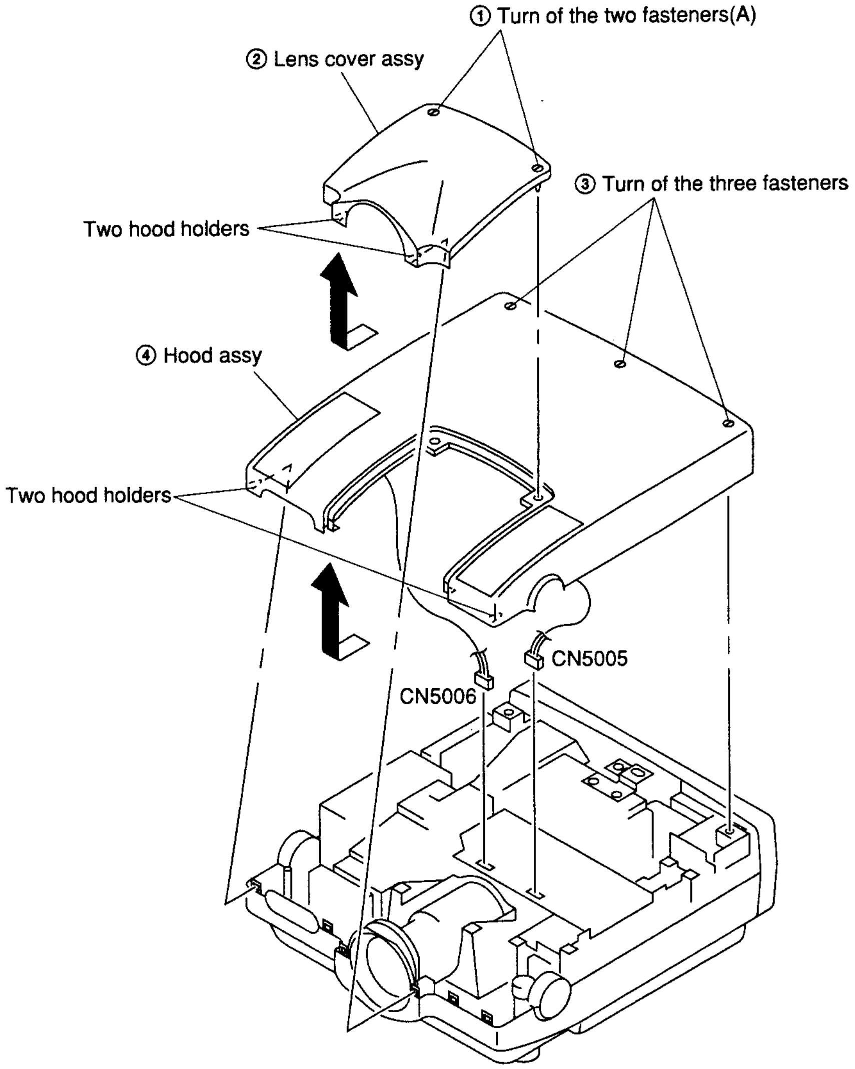


XE board (A-1501-122-A)
For boards BC,GAA,GAB,GB,and QA

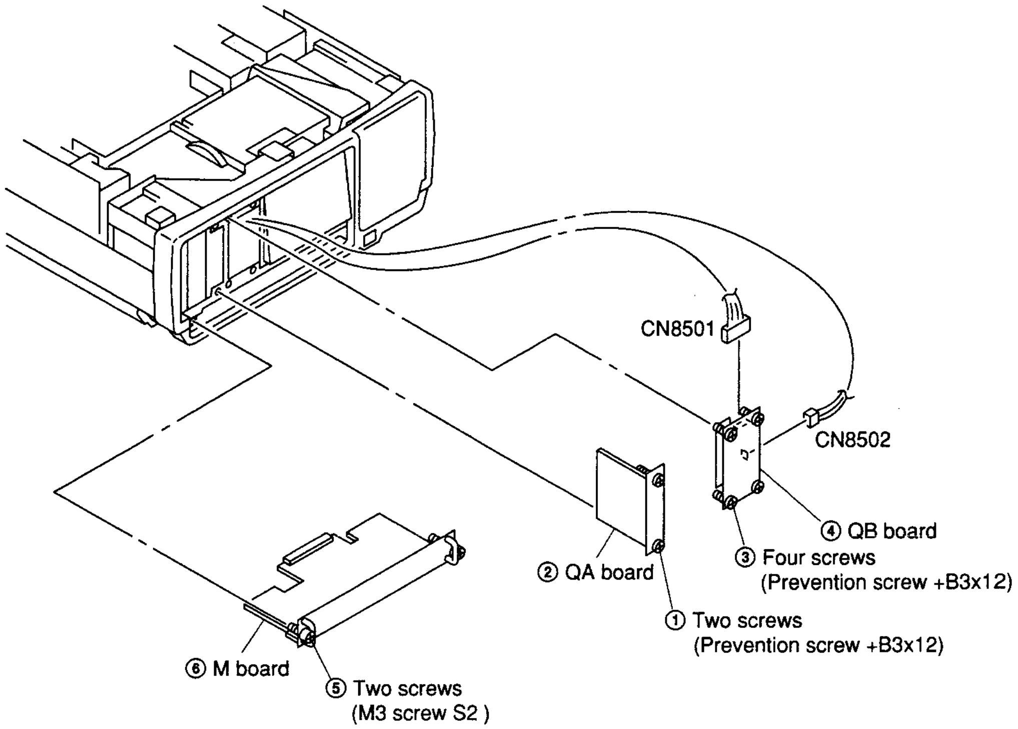


XTA board (A-1390-928-A)
For boards BA and BB

2-3. Cover Removal

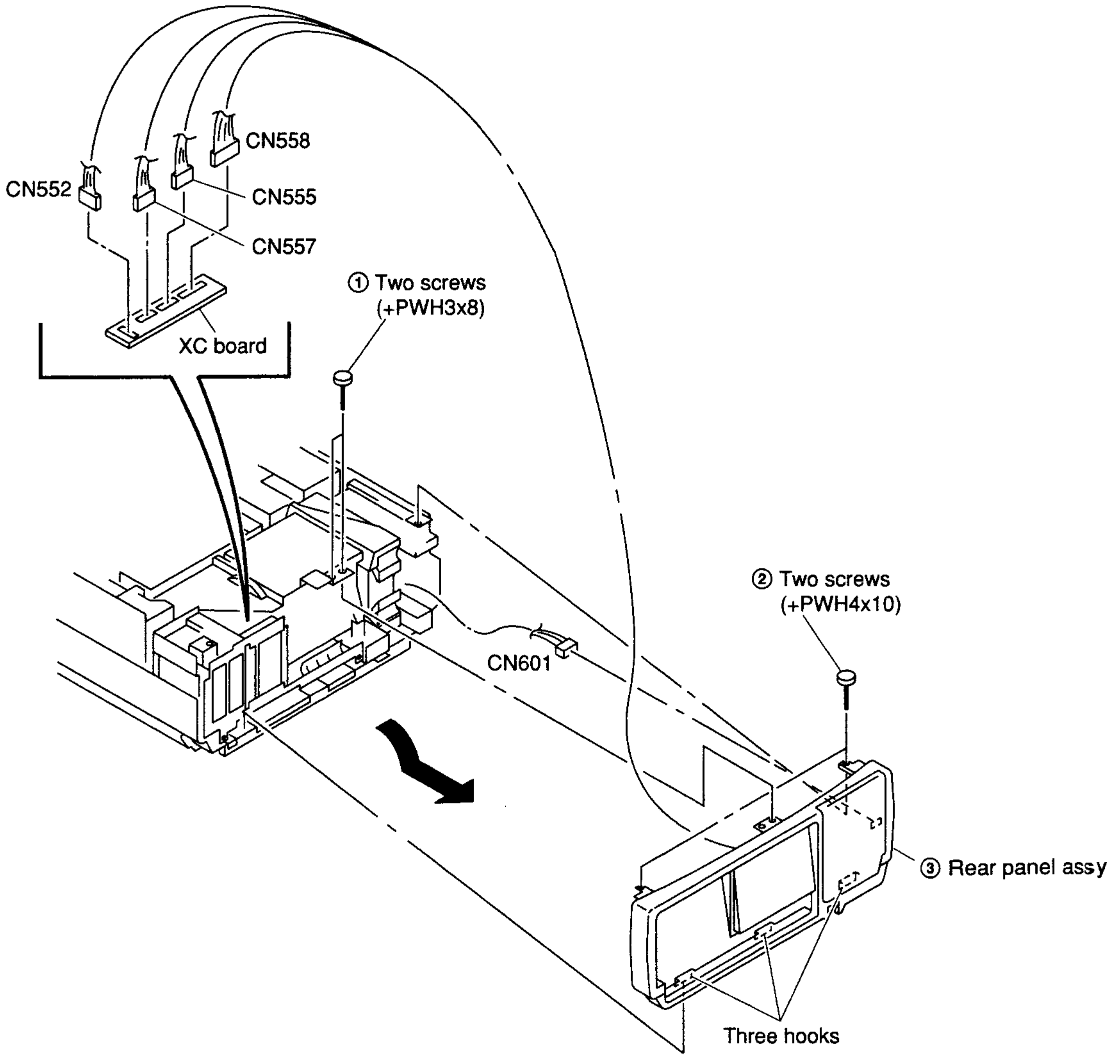

① Turn of the two fasteners(A)
② Lens cover assy
③ Turn of the three fasteners
Two hood holders
④ Hood assy
Two hood holders
CN5005
CN5006

2-4. M,QA and QB Boards Removal


CN8501
CN8502
④ QB board
③ Four screws
(Prevention screw +B3x12)
② QA board
① Two screws
(Prevention screw +B3x12)
⑥ M board
⑤ Two screws
(M3 screw S2)

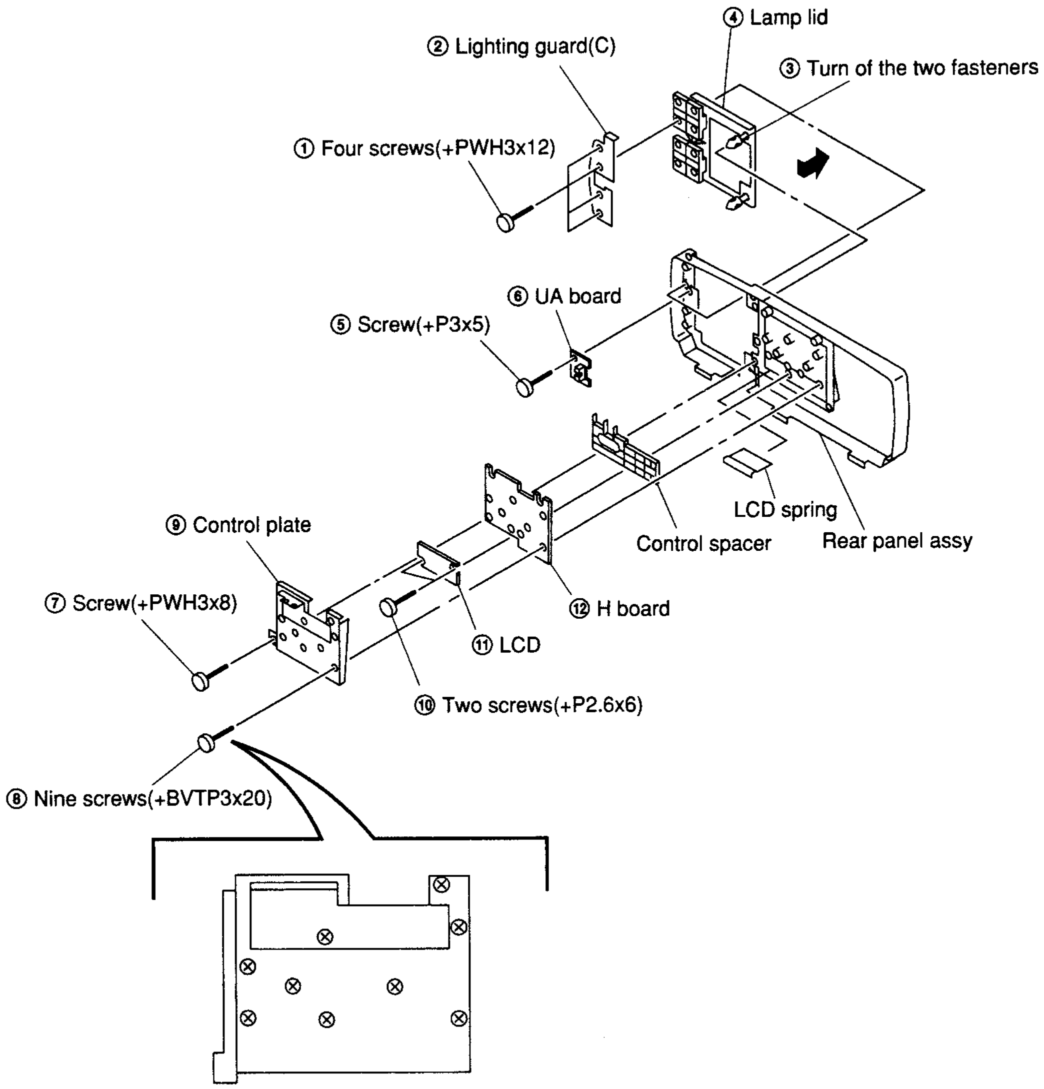
2-5. Rear Panel Assy Removal

•Remove the M and QB boards.

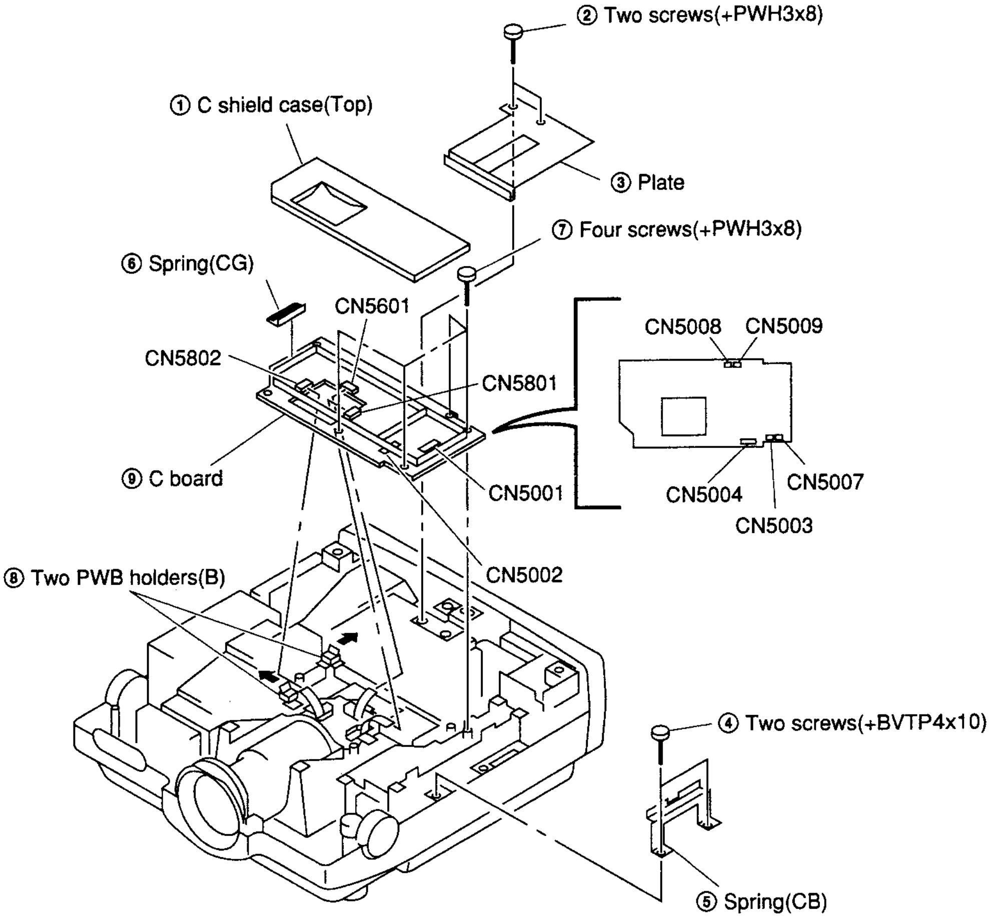

CN558
CN552
CN555
CN557
XC board
① Two screws
(+PWH3x8)
② Two screws
(+PWH4x10)
CN601
③ Rear panel assy
Three hooks

2-6. UA and H Boards Removal

•Remove the rear panel assy.

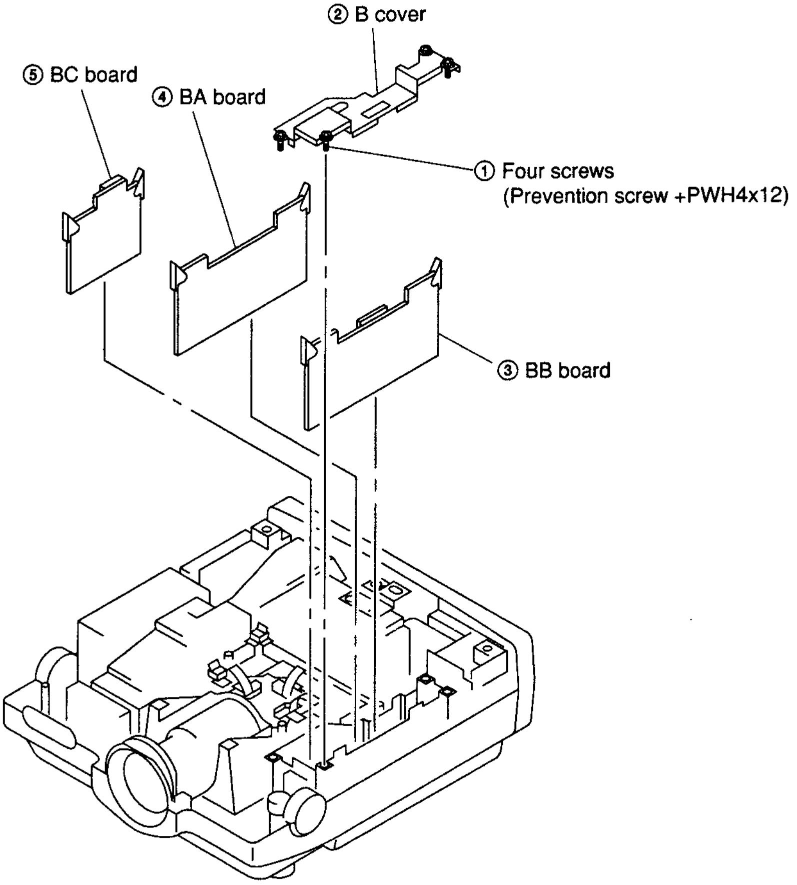

④ Lamp lid
② Lighting guard(C)
③ Turn of the two fasteners
① Four screws(+PWH3x12)
⑥ UA board
⑤ Screw(+P3x5)
⑨ Control plate
LCD spring
Control spacer
Rear panel assy
⑦ Screw(+PWH3x8)
⑫ H board
⑪ LCD
⑩ Two screws(+P2.6x6)
⑧ Nine screws(+BVTP3x20)

2-7. C Board Removal

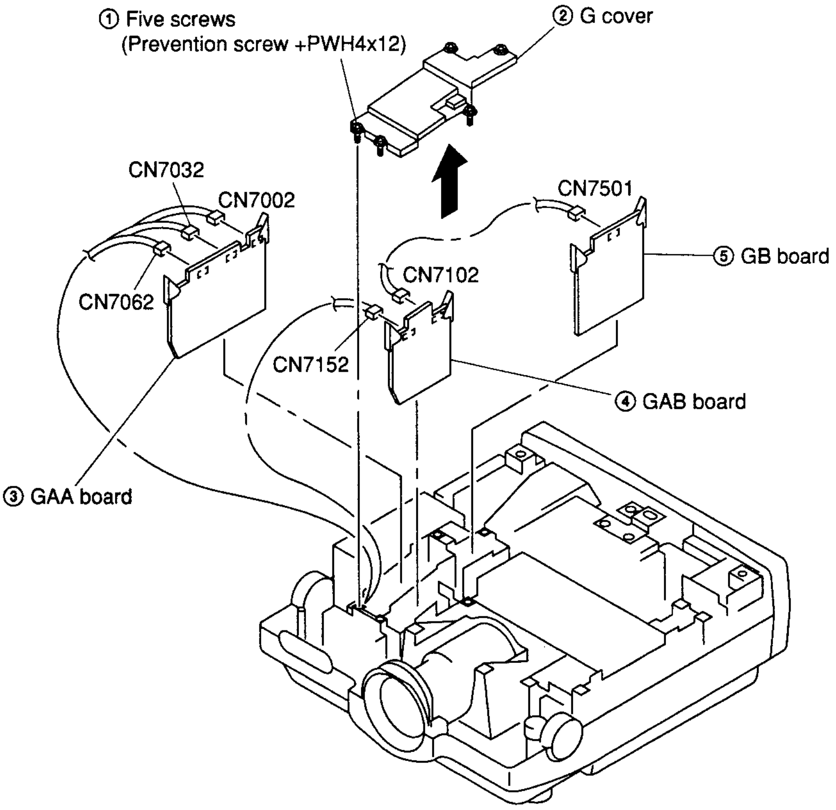

② Two screws(+PWH3x8)
① C shield case(Top)
③ Plate
⑦ Four screws(+PWH3x8)
⑥ Spring(CG)
CN5601
CN5008
CN5009
CN5802
CN5801
⑨ C board
CN5001
CN5004
CN5007
CN5003
⑧ Two PWB holders(B)
CN5002
④ Two screws(+BVTP4x10)
⑤ Spring(CB)

2-8. BA, BB and BC Boards Removal

- Remove the C board.

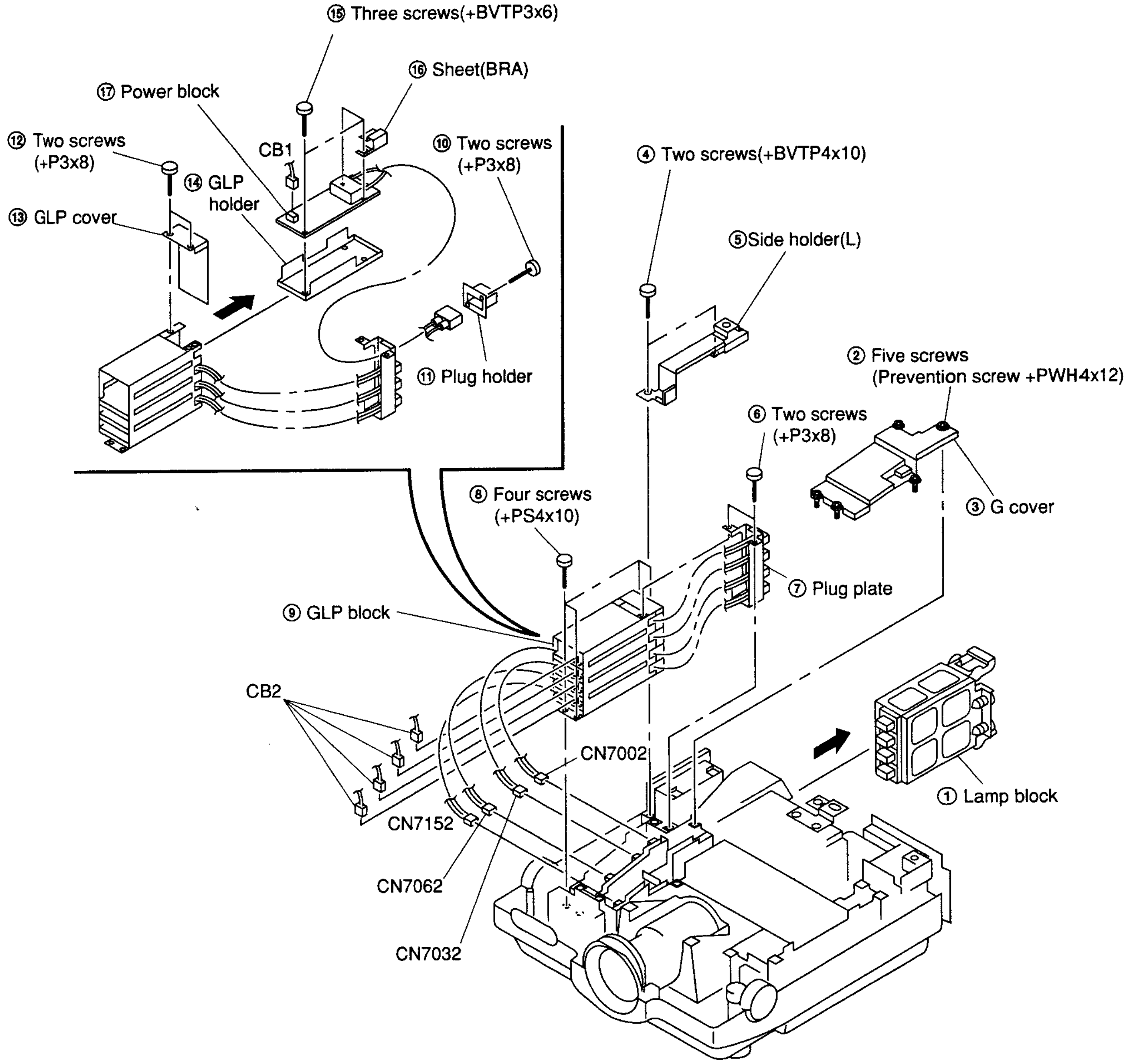

② B cover
⑤ BC board
④ BA board
① Four screws
(Prevention screw +PWH4x12)
③ BB board

2-9. GAA, GAB and GB Boards Removal


① Five screws
(Prevention screw +PWH4x12)
② G cover
CN7032
CN7002
CN7501
CN7102
⑤ GB board
CN7062
CN7152
④ GAB board
③ GAA board

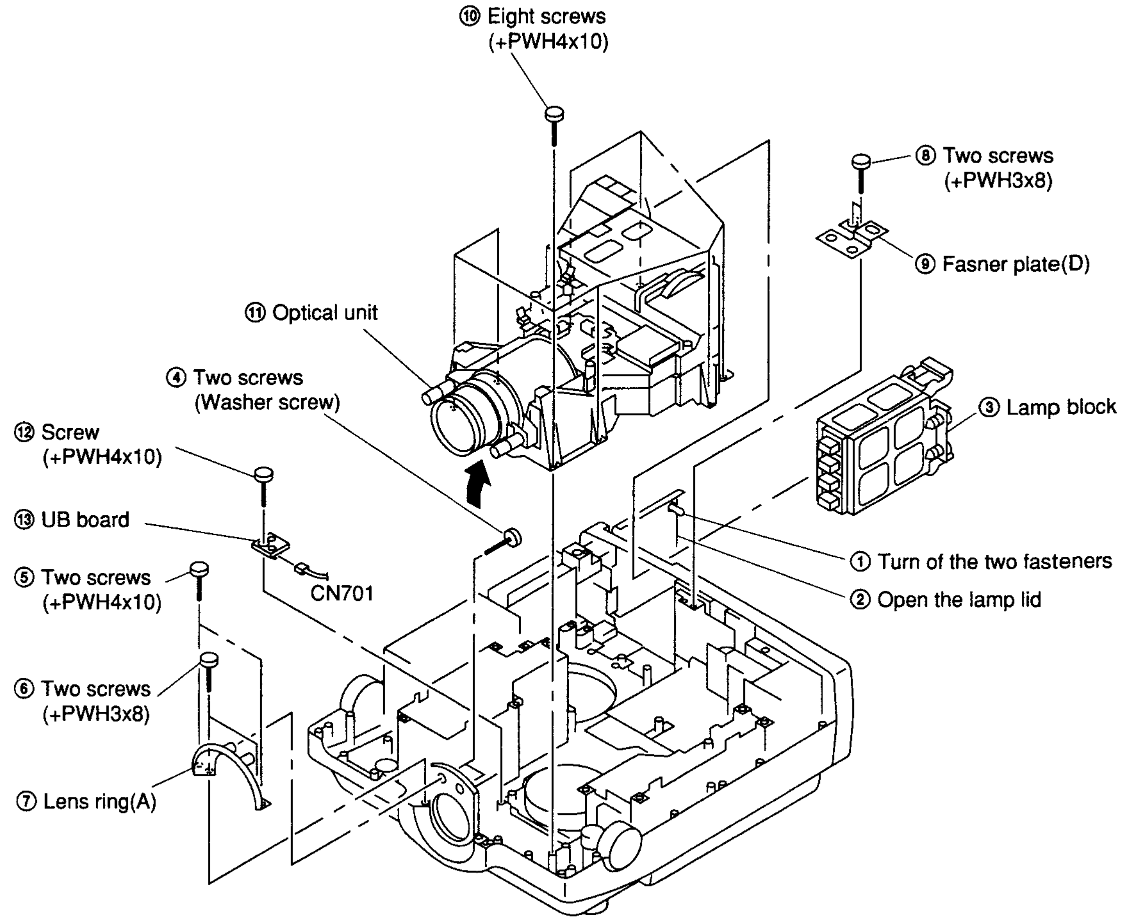
2-10. Power Block Removal

•Remove the rear panel assy.


⑮ Three screws(+BVTP3x6)
⑯ Sheet(BRA)
⑰ Power block
⑫ Two screws (+P3x8)
CB1
⑩ Two screws (+P3x8)
⑭ GLP holder
⑬ GLP cover
⑪ Plug holder
④ Two screws(+BVTP4x10)
⑤Side holder(L)
② Five screws (Prevention screw +PWH4x12)
⑥ Two screws (+P3x8)
③ G cover
⑧ Four screws (+PS4x10)
⑦ Plug plate
⑨ GLP block
CB2
CN7002
① Lamp block
CN7152
CN7062
CN7032

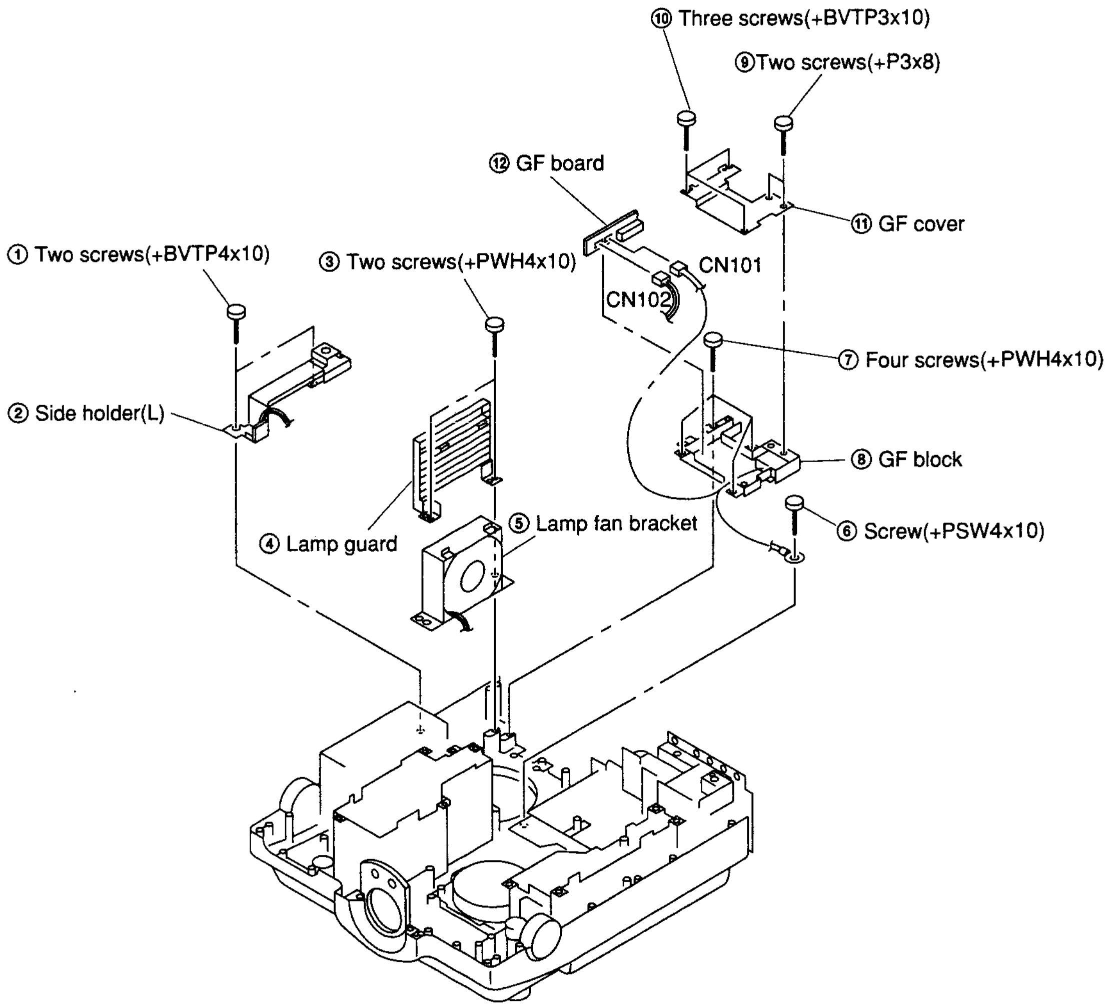
2-11. Optical unit and UB Board Removal

•Remove the C board.


⑩ Eight screws (+PWH4x10)
⑧ Two screws (+PWH3x8)
⑨ Fasner plate(D)
⑪ Optical unit
④ Two screws (Washer screw)
③ Lamp block
⑫ Screw (+PWH4x10)
⑬ UB board
⑤ Two screws (+PWH4x10)
CN701
① Turn of the two fasteners
② Open the lamp lid
⑥ Two screws (+PWH3x8)
⑦ Lens ring(A)

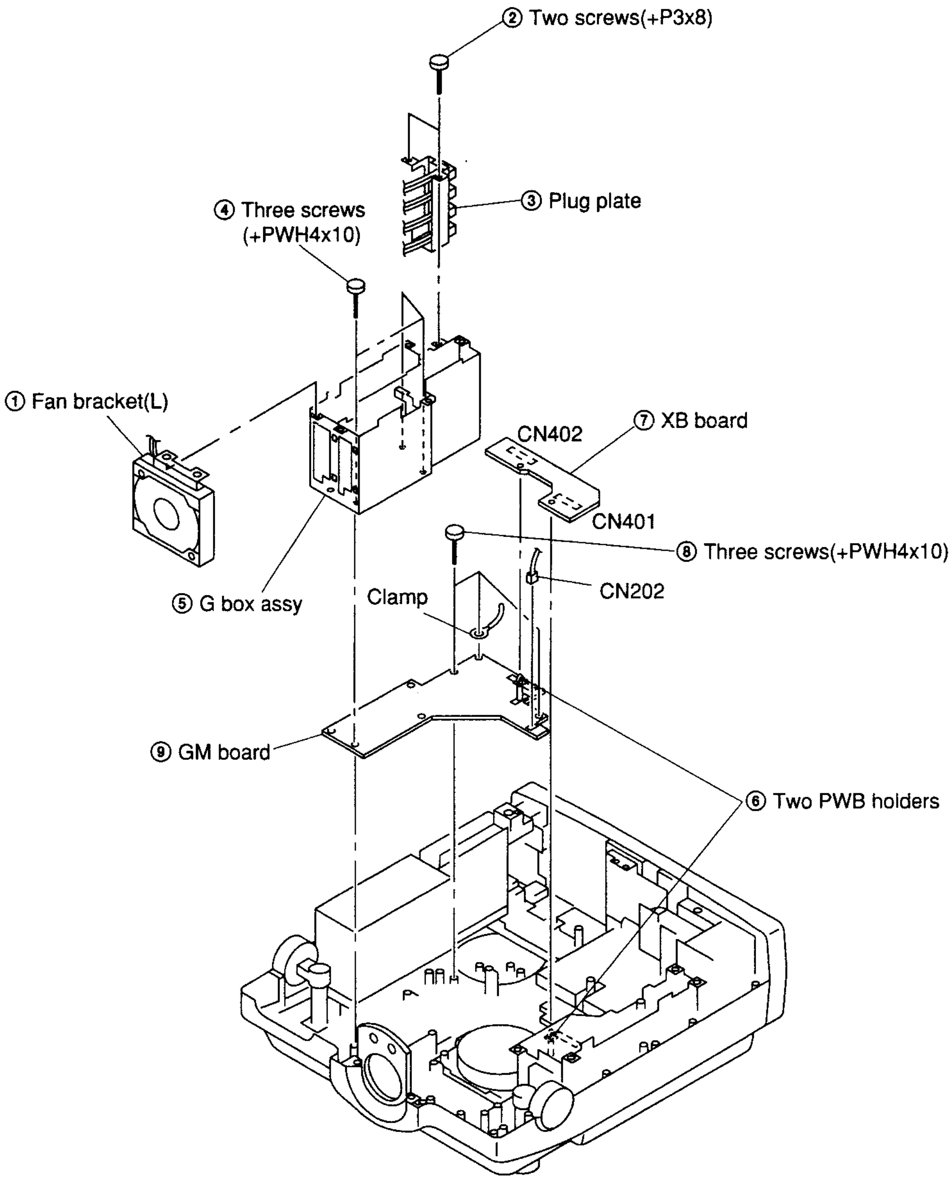
2-12. GF Board Removal

- Remove the optical unit.
- Remove the rear panel assy.


⑩ Three screws(+BVTP3x10)
⑨Two screws(+P3x8)
⑫ GF board
⑪ GF cover
① Two screws(+BVTP4x10)
③ Two screws(+PWH4x10)
CN101
CN102
⑦ Four screws(+PWH4x10)
② Side holder(L)
⑧ GF block
⑤ Lamp fan bracket
⑥ Screw(+PSW4x10)
④ Lamp guard

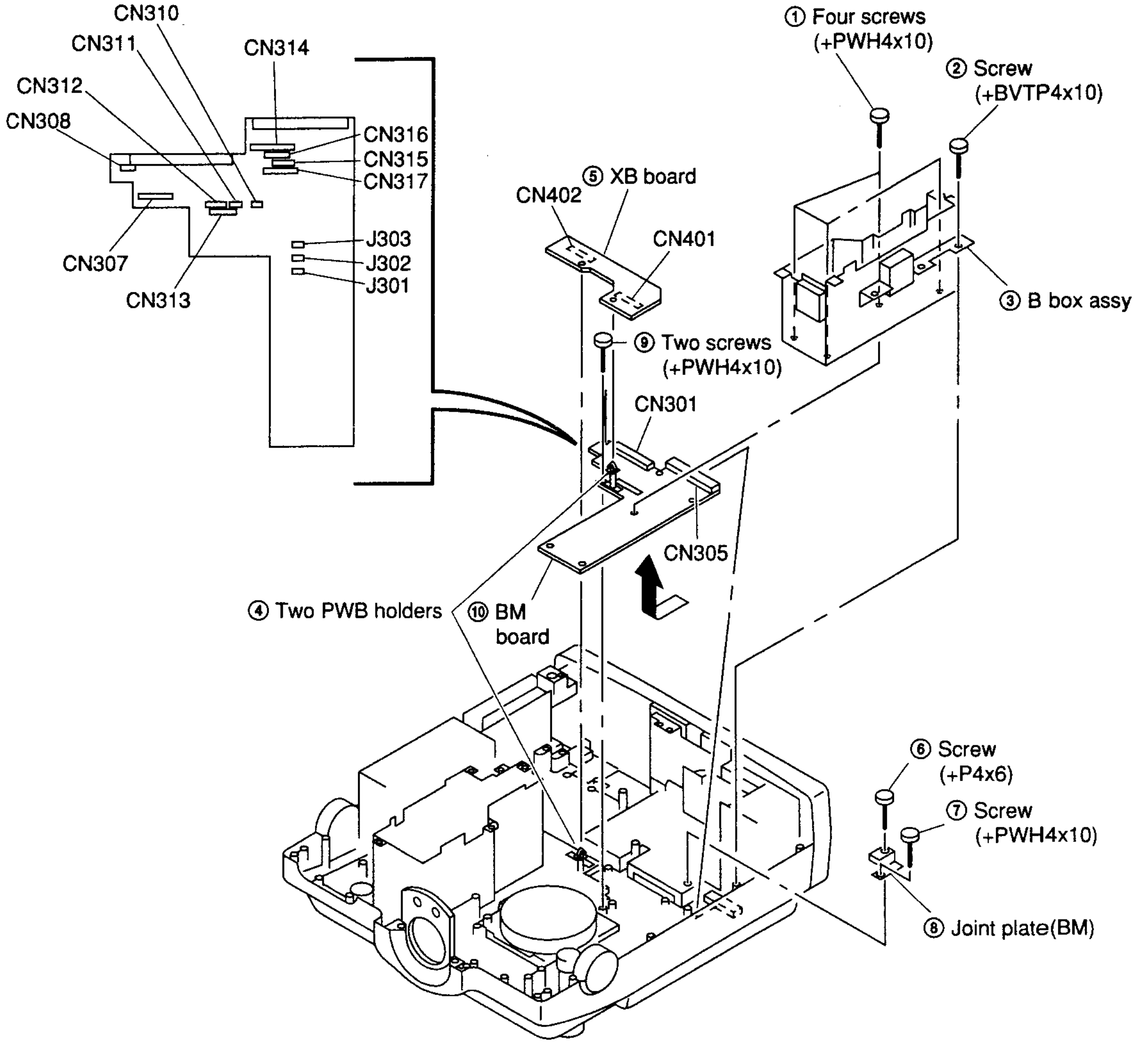
2-13. GM Board Removal

- Remove the GAA,GAB and GB boards.
- Remove the optical unit.


② Two screws(+P3x8)
③ Plug plate
④ Three screws (+PWH4x10)
① Fan bracket(L)
⑦ XB board
CN402
CN401
⑧ Three screws(+PWH4x10)
CN202
⑤ G box assy
Clamp
⑨ GM board
⑥ Two PWB holders

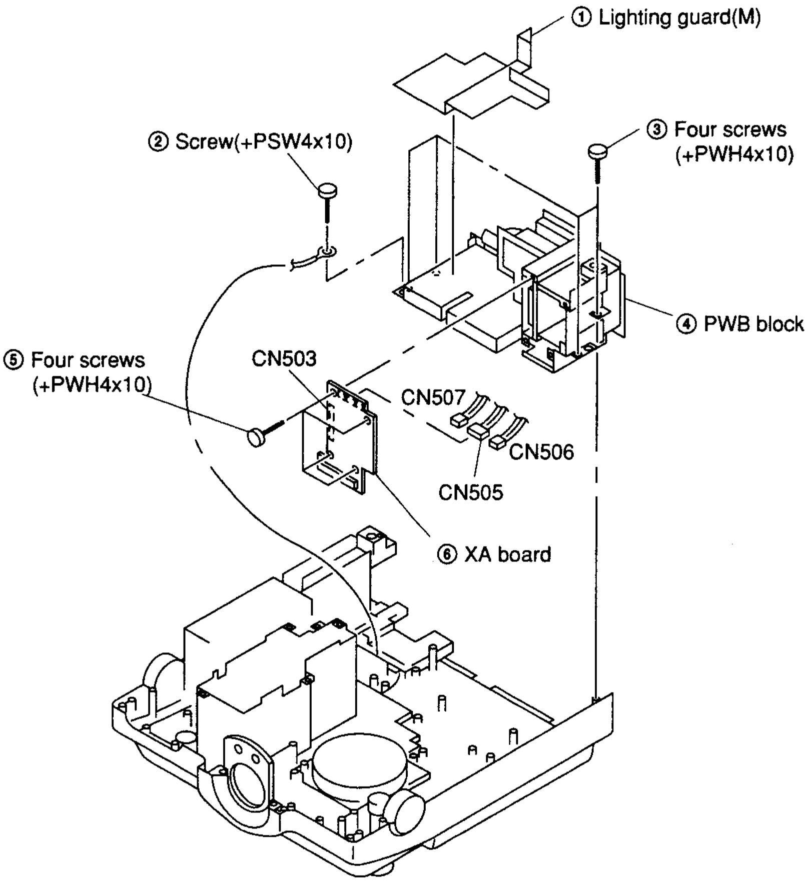
2-14. BM Board Removal

- Remove the BA,BB and BC boards.
- Remove the optical unit.


CN310
CN311
CN314
CN312
CN308
CN316
CN315
CN317
CN307
CN313
J303
J302
J301
① Four screws (+PWH4x10)
② Screw (+BVTP4x10)
⑤ XB board
CN402
CN401
③ B box assy
⑨ Two screws (+PWH4x10)
CN301
CN305
④ Two PWB holders
⑩ BM board
⑥ Screw (+P4x6)
⑦ Screw (+PWH4x10)
⑧ Joint plate(BM)

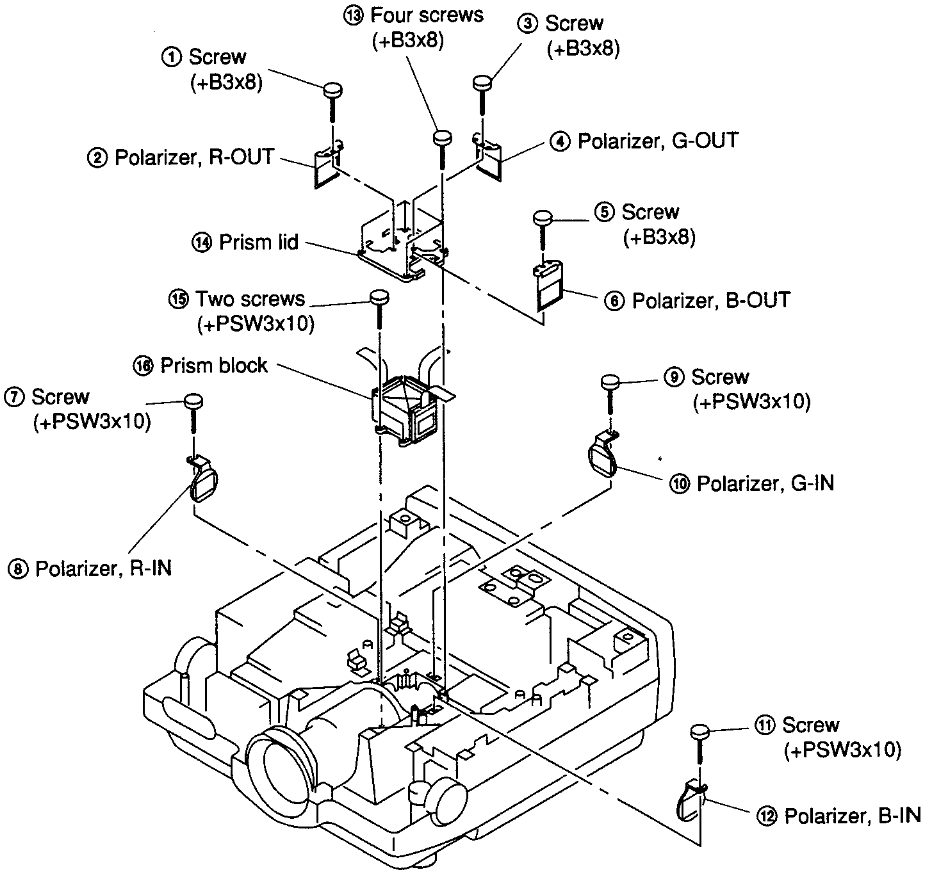
2-15. XA Board Removal

- Remove the BM board.
- Remove the rear panel assy.


① Lighting guard(M)
② Screw(+PSW4x10)
③ Four screws (+PWH4x10)
④ PWB block
⑤ Four screws (+PWH4x10)
CN503
CN507
CN506
CN505
⑥ XA board

2-16. Prism Block and R/G/B CH Condenser Lens Removal

- Remove the C board.


⑬ Four screws
(+B3x8)
③ Screw
(+B3x8)
① Screw
(+B3x8)
② Polarizer, R-OUT
④ Polarizer, G-OUT
⑤ Screw
(+B3x8)
⑭ Prism lid
⑮ Two screws
(+PSW3x10)
⑥ Polarizer, B-OUT
⑯ Prism block
⑦ Screw
(+PSW3x10)
⑨ Screw
(+PSW3x10)
⑩ Polarizer, G-IN
⑧ Polarizer, R-IN
⑪ Screw
(+PSW3x10)
⑫ Polarizer, B-IN

Section 3
Theory of Operation

The theory of operation of the BB, C, and M boards for VPL-FE100 are described.
Regarding the other boards, see the theory of operation (9-929-611-51) for VPL-X2000 U/E/M.

3-1. BB Board

3-1-1. Main Circuit Functions

- Image data parallel circuit
- Frame rate conversion circuit
- Resolution conversion circuit
- gmZ3/IP90C63 interface circuit
- APA detection circuit
- Contrast/bright adjustment circuit
- White balance adjustment circuit
- Test pattern generation circuit
- 3-dimensional gamma adjustment circuit
- OSD mix circuit
- ODD-EVEN switching circuit
- D/A conversion circuit
- M board CPU interface

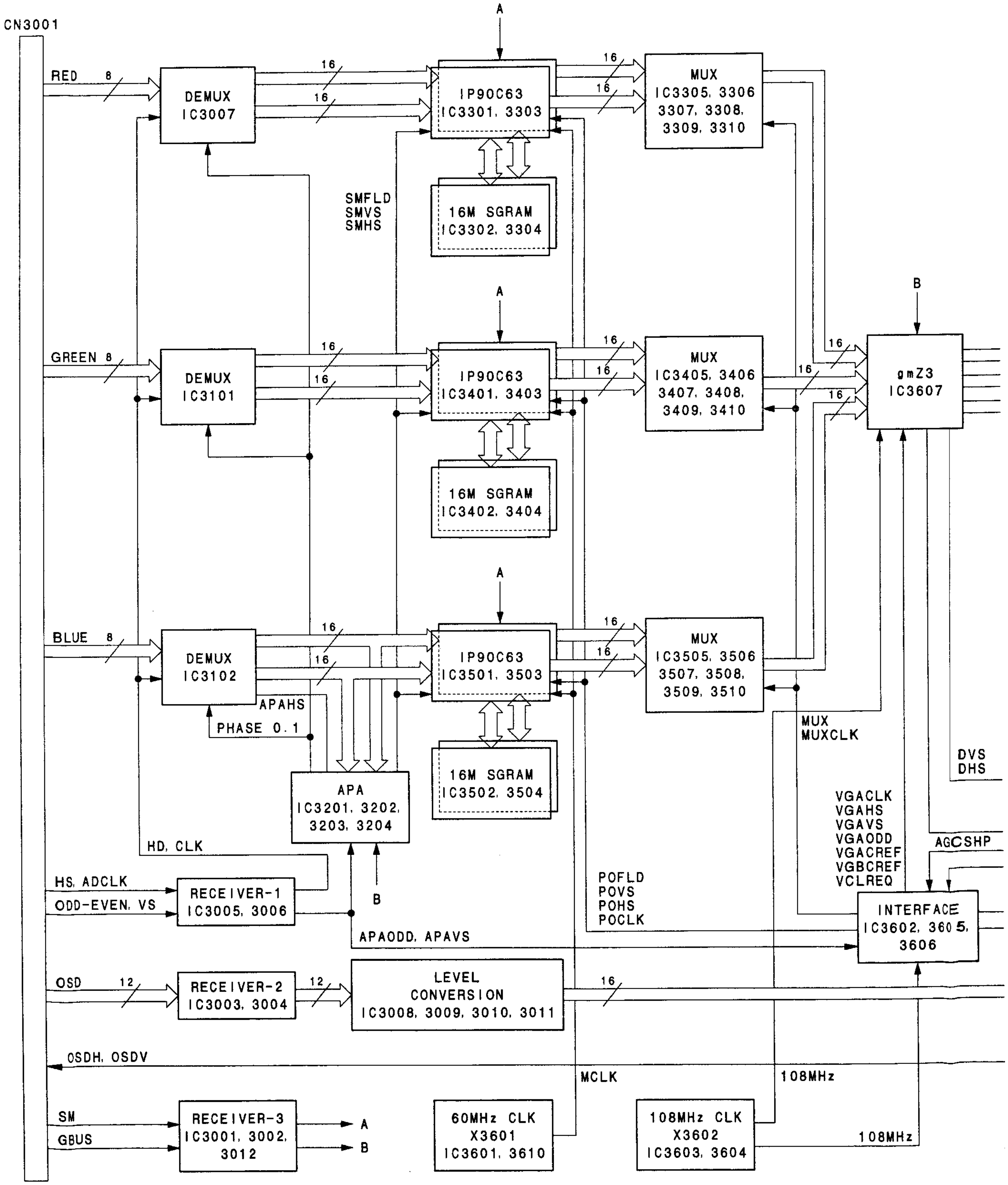
3-1-2. Outline

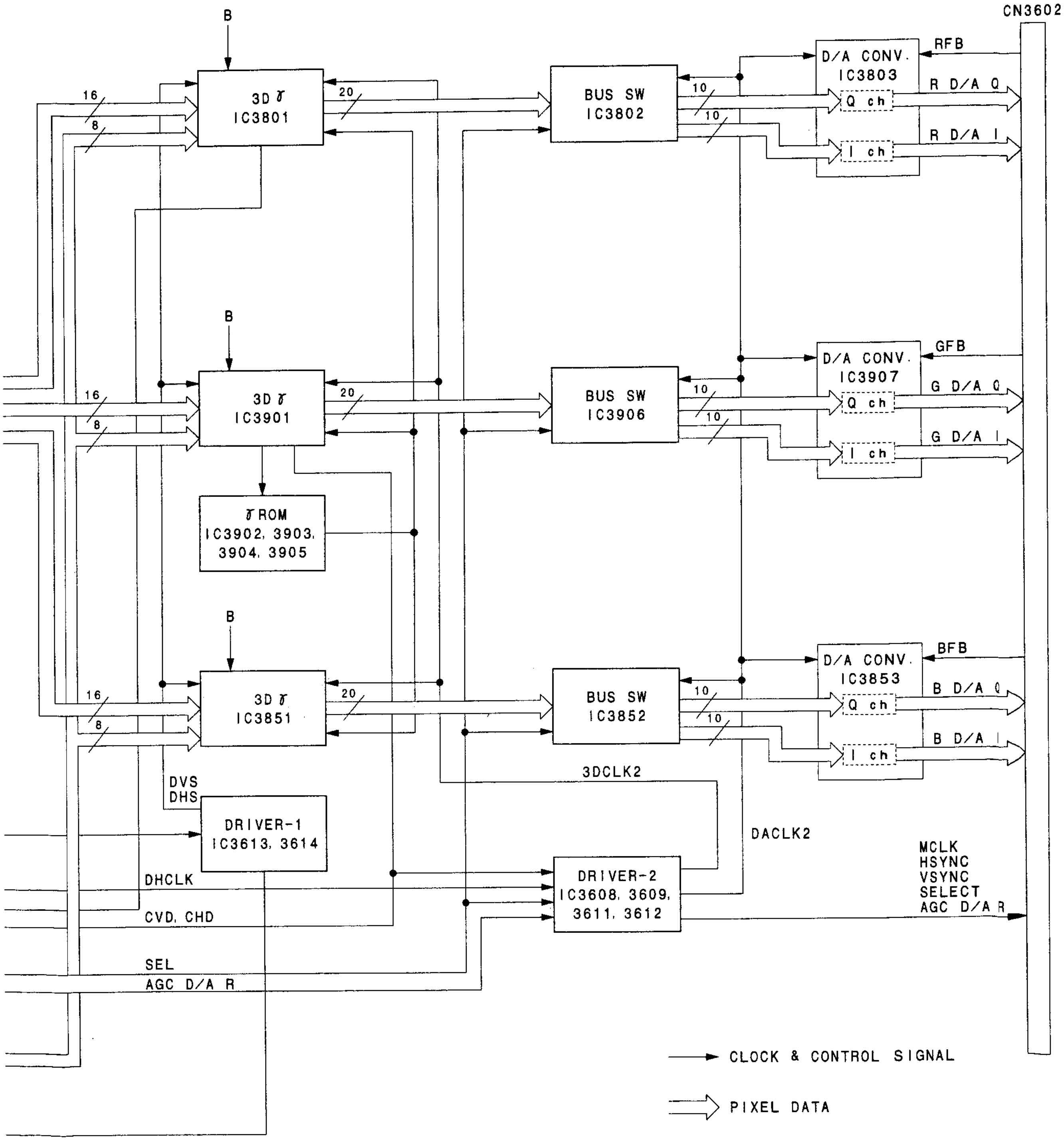
The input of the BB board is the data A/D converted to 8-bit RGB by the BA board.
In the BB board, all signals are processed digitally.
In the BB board, the following signal processing is performed.

- 3-1-4. Image data parallelization
- 3-1-5. Frame rate conversion
- 3-1-6. Resolution conversion
- 3-1-7. APA detection
- 3-1-8. Contrast/bright adjustment
- 3-1-9. White balance adjustment
- 3-1-10. 3-dimensional gamma adjustment
- 3-1-11. Test pattern generation
- 3-1-12. OSD mixing.

The processed digital (R,G,B) signals are converted to analog signals by the D/A conversion circuit and sent to the C board.
Consequently, data of various signal formats converted to the RGB signal by the A/D conversion circuit are input to the BB board.
The data input is converted to the SXGA signal format, further signal processed, and output as RGB signal converted to the analog signal.
In the BB board, as all signals are processed digitally, there are no parts requiring adjustments. As the output reference voltage of the D/A conversion IC which is the only analog circuit is set by the feedback circuit of the C
board, it does not require any adjustments.

3-1-3. BB Board Block Diagram


CN3001
RED
8
GREEN 8
BLUE
8
DEMUX
IC3007
DEMUX
IC3101
DEMUX
IC3102
16
16
A
IP90C63
IC3301, 3303
IP90C63
IC3401, 3403
IP90C63
IC3501, 3503
16M SGRAM
IC3302, 3304
16M SGRAM
IC3402, 3404
16M SGRAM
IC3502, 3504
SMFLD
SMVS
SMHS
MUX
IC3305, 3306
3307, 3308,
3309, 3310
MUX
IC3405, 3406
3407, 3408,
3409, 3410
MUX
IC3505, 3506
3507, 3508,
3509, 3510
B
gmZ3
IC3607
APAHS
PHASE 0.1
APA
IC3201, 3202,
3203, 3204
HD, CLK
MUX
MUXCLK
DVS
DHS
VGACLK
VGAHS
VGAVS
VGAODD
VGACREF
VGBCREF
VCLREQ
AGCSHP
POFLD
POVS
POHS
POCLK
HS, ADCLK
ODD-EVEN, VS
RECEIVER-1
IC3005, 3006
INTERFACE
IC3602, 3605,
3606
APAODD, APAVS
OSD
12
RECEIVER-2
IC3003, 3004
LEVEL
CONVERSION
IC3008, 3009, 3010, 3011
OSDH, OSDV
MCLK
108MHz
SM
GBUS
RECEIVER-3
IC3001, 3002,
3012
60MHz CLK
X3601
IC3601, 3610
108MHz CLK
X3602
IC3603, 3604


CN3602
B
3D γ
IC3801
16
8
20
BUS SW
IC3802
10
10
D/A CONV.
IC3803
Q ch
I ch
RFB
R D/A Q
R D/A I
B
3D γ
IC3901
16
8
20
BUS SW
IC3906
10
10
D/A CONV.
IC3907
Q ch
I ch
GFB
G D/A Q
G D/A I
γ ROM
IC3902, 3903,
3904, 3905
B
3D γ
IC3851
16
8
20
BUS SW
IC3852
10
10
D/A CONV.
IC3853
Q ch
I ch
BFB
B D/A Q
B D/A I
3DCLK2
DVS
DHS
DRIVER-1
IC3613, 3614
DACLK2
DHCLK
DRIVER-2
IC3608, 3609,
3611, 3612
CVD, CHD
MCLK
HSYNC
VSYNC
SELECT
AGC D/A R
SEL
AGC D/A R
CLOCK & CONTROL SIGNAL
PIXEL DATA

3-1-4. Image Data Parallelization Circuit

The R, G, B data A/D converted to 8 bits by the BA board are sent at a high speed clock frequency of 160 MHz at the maximum between the BA board and BB board.
This is realized by adopting the differential transfer of the ECL interface for transfer between boards. This transfer method enables data transfer at clock frequencies above 200 MHz. Furthermore, as 1 bit is performed using two cables (normal direction and reverse), it offers such advantages as strong resistance against external noise and little unwanted radiation. Therefore, power consumption is slightly increased.
The BB board performs signal processing of image data with a clock frequency of 160 MHz. The CMOS IC normally used does not operate at such high frequencies. Consequently, the data string input is divided by 4, and the clock frequency of the data is lowered to 1/4 and processed.
Consequently, 8-bit (D0, D1, D2, D3, D4, D5, D6, D7) data strings are divided into four data strings D0 and D4, D1 and D5, D2 and D6, and D3 and D7. As a result, the clock frequency becomes 1/4, while the data is multiplied by four times to become 32 bits from 8 bits.
After processing, the data string is converted to four RGB data strings. But as the maximum frequency of the clock drops to 40 MHz, signal processing by the CMOS IC after this circuit is possible.
The four frequency division is started based on the timing of the horizontal sync signal HS.
The start position of the frequency division can be shifted from 0 to 3 clocks one clock at a time. Consequently, it is possible to set where to start frequency division (D0, D1, D2 or D3). The start position of frequency division can be set using the 2 bits (PHASE 0 and PHASE 1). This function is used when adjusting the position below the H START 4.
The above process is performed by the DEMUX circuit in the clock diagram.

3-1-5. Frame Rate Conversion Circuit

This unit is input with various frame frequency signals; 60 Hz for the NTSC method, 50 Hz for the PAL method, and 60 Hz/75 Hz/85 Hz for the SXGA method. As the LCD panel cannot deal with high frame frequencies, if the frame frequency of
the input signal is high, the frame frequency is lowered by the following process. Consequently, memory of one frame is mounted for R, G, and B to convert the frame rate by performing writing and reading independently.
In this unit, when the frame frequency of the input signal is less than 62 Hz, the frame frequency of writing and reading is made the same. In this case, the frame may be exceeded for some magnification percentages or VSHIFT values.
When the frame frequency of the input signal is above 62 Hz, the frame frequency for reading is fixed at 62 Hz. In this case, the frame is always overtaken. Since the signal input to the computer has not moving image synchronized with the frame, no problems occur.
In the case of the video input, when the frame is overtaken, the picture quality drops. Therefore, only for video inputs (including HDTV), the memory is divided into the ODD and EVEN fields. When the data is written in the ODD field, the EVEN field is read, and vice versa to prevent overtaking of the frame.
The LCD panel is always driven at frame frequencies below 62 Hz using the above method.
The above process is performed by the memory controller (IP90C63) and memory (16M SGRAM) shown in the block diagram. The memory controller (IP90C63) is input with the 8-bit 4-phase R,G,B signals. Although the output is 8-bit 4-phase R,G,B signals, the clock frequency is doubled at the MUX circuit connected to the later stage, to convert the R,G, and B signals to 8-bit 2 phases. This is because the resolution conversion circuit (gmZ3) in the next stage is a 8-bit 2-phase input.
In the BB board, only the frame memory functions at 60 MHz. All circuits after the memory controller (IP90C63) operate at 108 MHz or frequency-divided 54 MHz. These frequencies are constant regardless of the input signal.
The frame memory is able to store 2 frames of the signals of the maximum screen of 1600 pixels × 1200 lines.

3-1-6. Resolution Conversion Circuit

For the output of the frame rate conversion circuit, the resolution of the effective screen is not horizontal 1280 pixels and vertical 1024 lines other than when the input signal is SXGA. The output is the resolution of the input signal. Therefore, there is a need to convert the resolution of the LCD panel to horizontal 1280 pixels/vertical 1024 lines.
The resolution is converted by the gmZ3 in the block diagram. The gmZ3 output is resolution of SXGA and 8-bit 2-phase R,G, and B.
The gmZ3 sends a request to the IP90C63 when image data is required and reads from the IP90C63 at units of one line. Consequently, the IP90C63 functions as a buffer memory.
Since the gmZ3 magnifies by resolution conversion, the pixel number input to the gmZ3 is less than that output from the gmZ3. The input clock of the gmZ3 is 54 MHz while the output clock is 108 MHz. The output pixel of the gmZ3 is fixed at SXGA. But as the input pixel number of the gmZ3 differs depending on the magnification rate and is less than the output pixel number, the effective line is intermittently set. Consequently, the output of the IP90C63 differs from the VGA and SVGA, and is not a specific signal format.

3-1-7. gmZ3/IP90C63 Interface Circuit

The frame rate conversion circuit and resolution conversion circuit are composed of ICs of different manufacturers. Consequently, no handshake for directly receiving image data is performed. The both handshake signals are converted by the gmZ3&IP90C63 interface circuit and generated by the field program gate array (field programmable gate array).

3-1-8. APA Detection Circuit

When the APA key of the remote controller or control panel is pressed, the DOT PHASE adjustment is automatically executed. The APA adjusts the DOT PHASE so that the image displayed on the LCD panel can be seen most clearly.
When the APA key is pressed, the microcomputer sequentially changes the DOT PHASE adjustment value from 0 to 31. The APA detection circuit calculates the resolution of the screen at each adjustment value for all the pixels of the screen. Finally, the microcomputer sets the DOT PHASE to the adjustment value with the highest resolution. Consequently, when the input image is a still image, automatic adjustment of the DOT PHASE can be performed against only one dot on a black background or all gray flat field screen except for special cases such as an all black screen. The APA detection circuit also performs the process for when the number of lines of the input signal is more than 1024 lines of the SXGA.
As mentioned earlier, the resolution conversion circuit performs only the magnification of the input signal. Consequently, when the UXGA signal is input, the number of pixels input to the frame rate conversion circuit must be
thinned to below 1280 pixels × 1024 lines beforehand. For example, there is a need to thin the 1600 pixels × 1200 lines of the UXGA signal to 1280 pixels × 960 lines.
The thinning of the effective number of pixels of one line to 1280 pixels is performed by sampling the effective screen to 1280 pixels by the A/D conversion circuit of the BA board. In this case, as the number of effective pixels of the input signal and sampled number of pixels differ, there is no need to adjust the DOT PHASE. However, the image appears different when the DOT PHASE is changed.
The thinning of the line number of one screen to below 1024 lines is performed by the APA circuit. The horizontal sync signal of the input signal is input to the frame rate conversion circuit by thinning and the line written in the frame rate conversion circuit is thinned. To decrease 1200 lines to 960 lines, 1 line is thinned for every 5 lines to reduce to 80%.

3-1-9. Contrast and Bright Adjustment Circuit

The contrast and bright adjustment is performed by digital calculation by the 3Dγ circuit in the block diagram.
The contrast adjustment is performed by adding the contrast adjustment value to the image data. At the same time, bright adjustment is performed by multiplying the bright adjustment value with the image data.

3-1-10. White Balance Adjustment Circuit

White balance adjustment is performed by digital calculation by the 3Dγ circuit shown in the block diagram.
The calculation performed during white balance adjustment is different from the standard contrast and bright adjustment, and is equivalent to the contrast and bright adjustment performed independently for R, G, and B. The white balance adjustment name is different. It is called gain and bias adjustment.
The gain adjustment is performed by multiplying the gain adjustment value with the image data. Consequently, the calculation in the gain adjustment is performed in the same way as that of the contrast adjustment.
The bias adjustment is performed by adding the bias adjustment value to the image data. Consequently, the calculation in the bias adjustment is performed in the same way as that of the bright adjustment.
Blanking is performed by setting the data to 0 after the white balance adjustment. Consequently, even if the contrast
and bright are changed, or the white balance is changed, the blanking level does not change.

3-1-11. Test Pattern Generation Circuit

The hatch pattern for the test pattern is generated in the circuit connected to the white balance adjustment circuit of the 3Dγ circuit in the block diagram. The test pattern is substituted by the input image signal as digital data and output.
Consequently, the contrast/bright adjustment and white balance adjustment are not related.

3-1-12. 3-Dimensional Gamma Adjustment Circuit

In this circuit, the functions of the input voltage and transmittance rate of the LCD panel are changed so that they become the input voltage and brightness gamma characteristics functions of general CRT displays.
Generally, gamma correction is performed using the analog IC. But in this unit, it is performed by digital processing. As detailed correction can be performed in digital gamma correction, gradation reproducibility is excellent. Different gamma correction data of R, G, and B are written in the @@ ROM circuit shown in the block diagram .
This unit is equipped with a circuit (3-dimensional digital gamma correction circuit) with improved uniformity of the projected screen.
Due to the presence of various factors such as lamp, optical system, and LCD panel, the characteristics of the input voltage and brightness of the image projected differ by pixel. Consequently, when the whole screen is processed using one gamma function, the uniformity drops, brightness decreases at the center of the screen, and the color differs according to the location.
In the correction performed by signal processing, different RGB gamma functions are provided for all pixels of the SXGA panel. The functions differ according to the model. In this unit, there is a need to measure the image projected. In this case, the number of gamma functions is enormous (1280 pixels × 1024 pixels × 3 (RGB)), and it is not possible to measure the gamma function data.
By providing gamma functions for only the representative pixels (5 pixels horizontally, and 5 vertically on the screen), the gamma function is corrected using four representative pixels in the vicinity, and

different gamma
functions are obtained for all pixels of the screen.
As the gamma function is that for the digital input (256 level), it is difficult to provide outputs for 256 inputs using one representative pixel due to the enormous data volume. Consequently, the standard gamma function common to all models are stored in the ROM beforehand, and the correction function which is the differential value by model for the stored gamma function is obtained. Since it is also difficult to measure the correction function at the input level of all 256 inputs, the correction function is measured for every 16 input level. The correction value for the input level during this time is corrected from the correction value measured at two surrounding points to obtain the correction function.

Correction point:
Horizontal 1280 pixels × vertical 1024 pixels × 3 (RGB) × 256 level: 603979776 points
Consequently, the representative points actually corrected by the above method are:
Horizontal 6 pixels × vertical 5 pixels × 3 (RGB) × 7 level= 630 points .
The 630 points are a suitable value as the correction value provided by measuring with the actual unit.
The correction value of the representative 630 points is measured for every unit. By interpolating all other points from the representative 8 points in the surrounding, correction is performed for R, G, and B at all input levels of all pixels.

3-1-13. OSD Mix Circuit

This circuit is composed of the 3Dγ circuit shown in the block diagram. Digital calculation is performed after 3 dimensional gamma adjustment. Consequently, the contrast and bright adjustment, white balance adjustment, and 3-dimensional gamma adjustment are not related. The OSD data and image data from the M board are switched by this circuit. Calculation for half blanking of the input images is also performed by this circuit.

3-1-14. ODD-EVEN Switching Circuit

Odd and even pixels are each output by 10 bit/2 phase from the 3-dimensional gamma circuit shown in the block diagram. As two channels of the D/A converter in the D/A conversion circuit operate at one reference voltage, the level differs
slightly for each output. Consequently, when the channel is fixed, the brightness difference of the odd and even pixels of the image may appear as vertical lines in some cases.
To reduce this, the channel is switched for every line between the odd and even pixels.
The BUS SW circuit in the block diagram switches the 10 bits of the odd and even pixels of the 3-dimensional gamma circuit for every line and outputs to the D/A conversion circuit. For example, taking the I channel of the D/A conversion circuit as an odd pixel, the Q channel as an even pixel, in the next line, I and Q are switched to the even pixel and odd pixel respectively.

3-1-15. D/A conversion Circuit

The D/A conversion circuit of the RGB incorporates a D/A circuit for two channels. The 10-bit 2-phase input from the bus switch circuit in the block diagram is D/A converted at 54 MHz for both channels. The analog output generated is supplied with the reference voltage from the C board so that the white level is always function. Consequently, no adjustments are required.
The output of the D/A conversion circuit is output at 2 phases mixing the odd and even pixels (switched for every line). The reverse process is performed at the C board to return the 2 phase of the even and odd pixels.

3-1-16. M Board CPU Interface

There are two types of CPU interfaces for each IC of the BB board. The frame rate conversion circuit is controlled by the A bus in the block diagram. Other ICs are controlled by the CPU of the M board via the B bus.

3-1-17. Clock Generation Circuit

In the BB board, clocks are generated by the 60 MHz clock circuit and 108 MHz clock circuit in the block diagram. In the BB board, the frequency of stable 60 MHz and 108 MHz clocks generated by a crystal are changed periodically in the range of +0 to -2.5% by the spectrum expansion method. This is because the peak power in the frequency range of the clock disperses when the clock is spectrum-dispersed, and the peak value of unwanted radiation decreases. When the waveform of the BB board is measured using an oscilloscope, the waveform often appears as jitter.

3-1-18. Malfunctioned Part Differentiation Method

Replace the BB board with a normal one, and check that this unit operates normally.
When the BB board is determined as faulty, check the following items. Failure to produce color and irregular patterns are also considered as faults.

(1) Project the RGB input of the SXGA. Disconnect the RGB cables of the input one by one, and check the following.
   1. Normal
   2. The odd pixel of red is abnormal, the even pixel is correct. Or the even pixel of red is abnormal and the odd pixel is correct.
   3. The odd pixel of green is abnormal, the even pixel is correct. Or the even pixel of green is abnormal and the odd pixel is correct.
   4. The odd pixel of blue is abnormal, the even pixel is correct. Or the even pixel of blue is abnormal and the odd pixel is correct.

For the above 2, 3, 4, the single color is abnormal and abnormal images will be seen overlapped with the normal image.

   5. Red is abnormal.
   6. Green is abnormal.
   7. Blue is abnormal.
   8. All colors are abnormal.

(2) Project the test pattern.
   1. Normal.
   2. Red is abnormal.
   3. Green is abnormal.
   4. Blue is abnormal.
   5. All colors are abnormal.

(3) Project the OSD.
   1. Normal.
   2. Red is abnormal.
   3. Green is abnormal.

4. Blue is abnormal.
5. All colors are abnormal.

Refer to the above items, and determine the corresponding problem. While referring to the malfunctioned block differentiation table for the BB board, determine the malfunctioned block.

Example 1: (1) All colors of the SXGA input are abnormal.

(2) All colors of the test pattern are abnormal.
(3) All colors of the OSD are abnormal.

Worst possible condition when the functions of the BB board are more or less not working.
Malfunction of the following blocks may be suspected according to the malfunctioned block differentiation table for the BB board.
GMZ3, RECEIVER-3, 108 MHz CLK, INTERFACE, DRIVER-1, DRIVER-2

Example 2: (1) Red is abnormal for the SXGA input.

(2) The test pattern is normal.
(3) The OSD is normal.

When the test pattern and OSD are normal, and only the input signal for red is abnormal. The malfunction of the following blocks may be suspected.
DEMUX-R, MUX-R

Example 3: (1) Red is abnormal for the SXGA input.

(2) Red of the test pattern is abnormal.
(3) Red of the OSD is abnormal.
When red is always abnormal. The malfunction of the following blocks may be suspected.
3Dγ -R, BUS SW-R, DA CONV-R

Blocks with high malfunction probability (including ICs with high integration degree) are;
DEMUX, APA, IP90C63, 16M SGRAM, gmZ3, 3Dγ, γ ROM, BUS SW, D/A CONV.
On the other hand, blocks with low malfunction probability;
MUX, RECEIVER-1, RECEIVER-2, RECEIVER-3, LEVEL CONVERSION, 60 MHz CLK, 108 MHz CLK, DRIVER-1, DRIVER-2

3-1-19. Precautions on Use of Oscilloscope

To prevent unwanted radiation of the unit, the clocks of the BB board are processed by spectrum dispersal. Consequently, when using the oscilloscope to measure, most signals of the BB board appear superimposed with jitters.

- To stop spectrum dispersal to facilitate repairs, remodel the unit as follows. After repairs, be sure to return to its original state.

Chip resistor 22	1-216-009-91	Deleted: R3622, R3670 Added: R3621, R3669

- To stop ODD-EVEN switching, remodel as follows. After repairs, be sure to return to its original state.

Chip resistor 0	1-216-295-91	Added:R3745

3-1-20. Malfunctioned Block Differentiation Table for the BB Board

			CONDITION									
			RGB INPUT									
BLOCK NAME		IC REFERRENCE	RO	GO	BO	RE	GE	BE	R	G	B	ALL
DEMUX	R	3007	O	O	O	O	O	O	X	O	O	O
	G	3101	O	O	O	O	O	O	O	X	O	O
	B	3102	O	O	O	O	O	O	O	O	X	O
APA		3201 3202 3203 3204	O	O	O	O	O	O	O	O	O	X
IP90C63-1	R	3301	X	O	O	O	O	O	O	O	O	O
	G	3401	O	X	O	O	O	O	O	O	O	O
	B	3501	O	O	X	O	O	O	O	O	O	O
IP90C63-2	R	3303	O	O	O	X	O	O	O	O	O	O
	G	3403	O	O	O	O	X	O	O	O	O	O
	B	3503	O	O	O	O	O	X	O	O	O	O
16M SGRAM-1	R	3302	X	O	O	O	O	O	O	O	O	O
	G	3402	O	X	O	O	O	O	O	O	O	O
	B	3502	O	O	X	O	O	O	O	O	O	O
16M SGRAM-2	R	3304	O	O	O	X	O	O	O	O	O	O
	G	3404	O	O	O	O	X	O	O	O	O	O
	B	3504	O	O	O	O	O	X	O	O	O	O
MUX	R	3305 3306 3307 3308 3309 3310	O	O	O	O	O	O	X	O	O	X
	G	3405 3406 3407 3408 3409 3410	O	O	O	O	O	O	O	X	O	X
	B	3505 3506 3507 3508 3509 3510	O	O	O	O	O	O	O	O	X	X
GMZ3		3607	O	O	O	O	O	O	O	O	O	X
3Dγ	R	3801	O	O	O	O	O	O	X	O	O	O
	G	3901	O	O	O	O	O	O	O	X	O	O
	B	3851	O	O	O	O	O	O	O	O	X	O
γROM		3902 3903 3904 3905	O	O	O	O	O	O	O	O	O	X
BUS SW	R	3802	O	O	O	O	O	O	X	O	O	O
	G	3906	O	O	O	O	O	O	O	X	O	O
	B	3852	O	O	O	O	O	O	O	O	X	O
D/A CONV.	R	3803	O	O	O	O	O	O	X	O	O	O
	G	3907	O	O	O	O	O	O	O	X	O	O
	B	3853	O	O	O	O	O	O	O	O	X	O
RECEIVER-1 (ECL/CMOS)		3005 3006	O	O	O	O	O	O	O	O	O	X
RECEIVER-2 (OSD DATA)		3003 3004	O	O	O	O	O	O	O	O	O	O
RECEIVER-3 (CPU BUS)		3001 3002 3012	O	O	O	O	O	O	O	O	O	X
LEVEL CONVERSION (OSD)		3008 3009 3010 3011	O	O	O	O	O	O	O	O	O	O
60MHz CLK		3601 3610	O	O	O	O	O	O	O	O	O	X
108MHz CLK		3604 3603	O	O	O	O	O	O	O	O	O	X
INTERFACE		3602 3605 3606	O	O	O	O	O	O	O	O	O	X
DRIVER-1		3613 3614	O	O	O	O	O	O	O	O	O	X
DRIVER-2		3608 3609 3611 3612	O	O	O	O	O	O	O	O	O	X

Judgment			
Judgment	If RO, GO or BO is "X"	:	Odd picture elements of R, G, and B are abnormal. Even picture elements are all normal.
	If RE, GE or BE is "X"	:	Even picture elements of R, G, and B are abnormal. Odd picture elements are all normal.
	If R is "X"	:	R is abnormal.
	If G is "X"	:	G is abnormal.
	If B is "X"	:	B is abnormal.
	If ALL is "X"	:	R, G, and B are all abnormal.

Malfunctioned Block Differentiation Table for the BB Board

			CONDITION							
			TEST PATTAER			OSD				
BLOCK NAME		IC REFERRENCE	R	G	B	L	R	G	B	ALL
DEMUX	R	3007	O	O	O	O	O	O	O	O
	G	3101	O	O	O	O	O	O	O	O
	B	3102	O	O	O	O	O	O	O	O
APA		3201 3202 3203 3204	O	O	O	O	O	O	O	O
IP90C63-1	R	3301	O	O	O	O	O	O	O	O
	G	3401	O	O	O	O	O	O	O	O
	B	3501	O	O	O	O	O	O	O	O
IP90C63-2	R	3303	O	O	O	O	O	O	O	O
	G	3403	O	O	O	O	O	O	O	O
	B	3503	O	O	O	O	O	O	O	O
16M SGRAM-1	R	3302	O	O	O	O	O	O	O	O
	G	3402	O	O	O	O	O	O	O	O
	B	3502	O	O	O	O	O	O	O	O
16M SGRAM-2	R	3304	O	O	O	O	O	O	O	O
	G	3404	O	O	O	O	O	O	O	O
	B	3504	O	O	O	O	O	O	O	O
MUX	R	3305 3306 3307 3308 3309 3310	O	O	O	O	O	O	O	O
	G	3405 3406 3407 3408 3409 3410	O	O	O	O	O	O	O	O
	B	3505 3506 3507 3508 3509 3510	O	O	O	O	O	O	O	O
GMZ3		3607	O	O	O	O	O	O	O	X
3Dγ	R	3801	X	O	O	O	X	O	O	O
	G	3901	O	X	O	O	O	X	O	O
	B	3851	O	O	X	O	O	O	X	O
γROM		3902 3903 3904 3905	O	O	O	X	O	O	O	O
BUS SW	R	3802	X	O	O	O	X	O	O	O
	G	3906	O	X	O	O	O	X	O	O
	B	3852	O	O	X	O	O	O	X	O
D/A CONV.	R	3803	X	O	O	O	X	O	O	O
	G	3907	O	X	O	O	O	X	O	O
	B	3853	O	O	X	O	O	O	X	O
RECEIVER-1 (ECL/CMOS)		3005 3006	O	O	O	O	O	O	O	O
RECEIVER-2 (OSD DATA)		3003 3004	O	O	O	O	X	X	X	X
RECEIVER-3 (CPU BUS)		3001 3002 3012	O	O	O	X	O	O	O	X
LEVEL CONVERSION (OSD)		3008 3009 3010 3011	O	O	O	O	X	X	X	X
60MHz CLK		3601 3610	O	O	O	O	O	O	O	O
108MHz CLK		3604 3603	O	O	O	X	O	O	O	X
INTERFACE		3602 3605 3606	O	O	O	X	O	O	O	X
DRIVER-1		3613 3614	O	O	O	X	O	O	O	X
DRIVER-2		3608 3609 3611 3612	O	O	O	X	O	O	O	X

Judgment

If RO, GO or BO is "X" : Odd picture elements of R, G, and B are abnormal. Even picture elements are all normal.

If RE, GE or BE is "X" : Even picture elements of R, G, and B are abnormal. Odd picture elements are all normal.

If R is "X" : R is abnormal.
If G is "X" : G is abnormal.
If B is "X" : B is abnormal.
If ALL is "X" : R, G, and B are all abnormal.

3-2. C Board

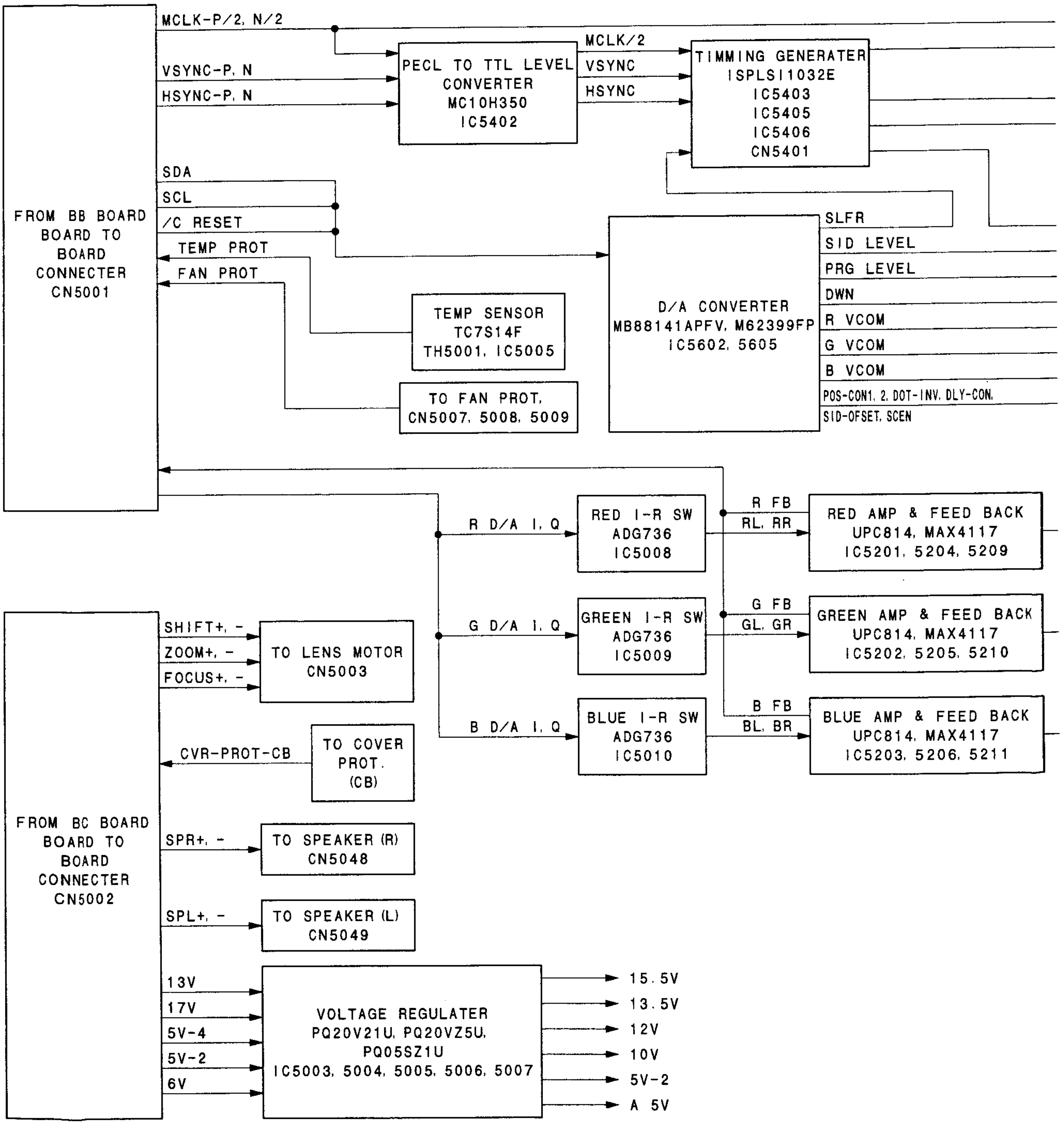
3-2-1. Outline

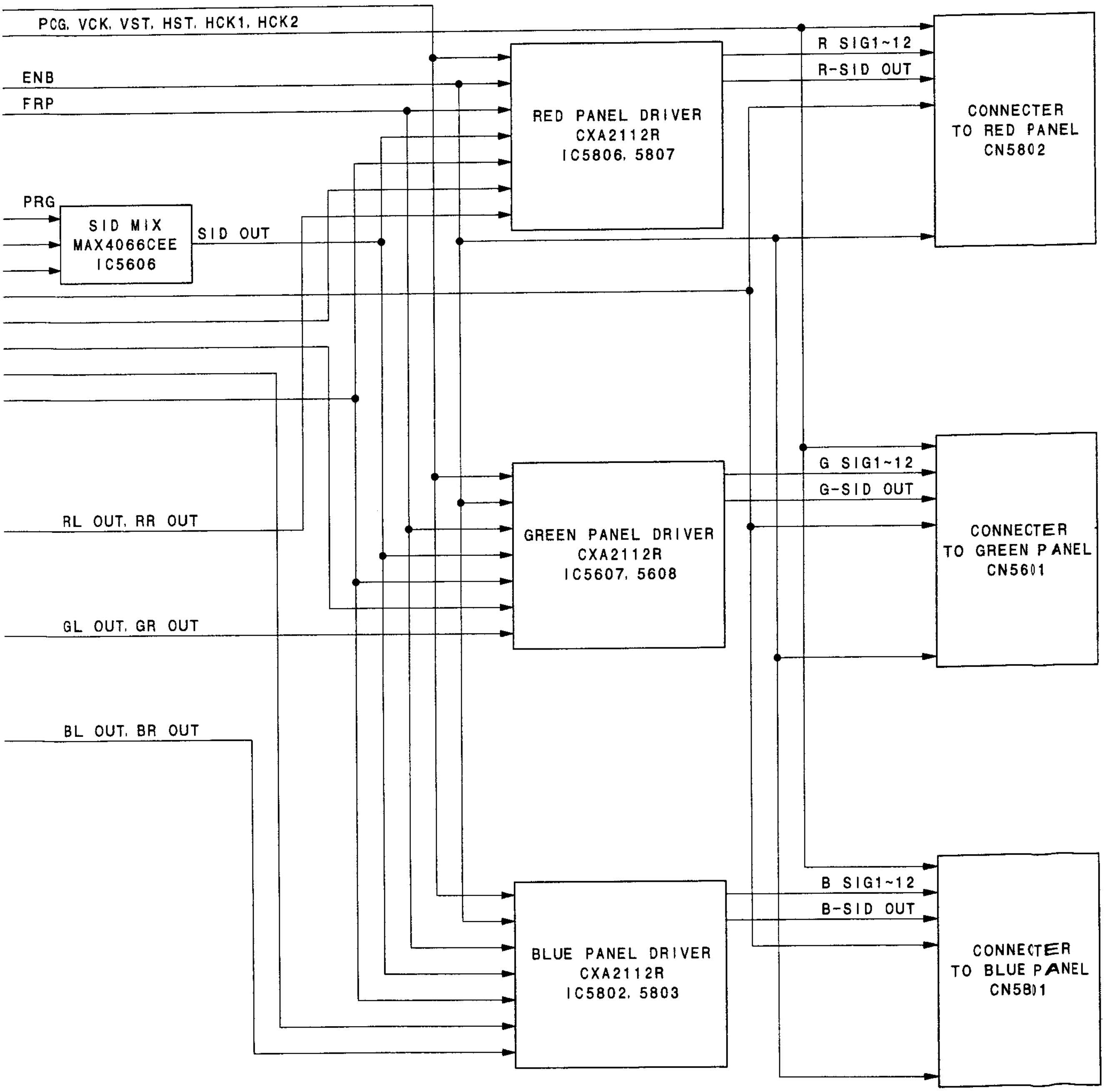
This board is composed of a circuit which drives video signals from the BB board to the LCD panel (LCX028).

3-2-2. Main Functions of C Board

The PECL level 1/2 CLK (1/2 frequency clock of the master clock), V SYNC (vertical sync), and H sync (horizontal sync) supplied from the BB board are converted to the TTL level by the PECL-TO-TTL LEVEL. Using these signal, the timing pules for driving the LCD panel such as PCG and PRG are generated by the timing generator.
In the D/A converter, the data sent via the IICBUS is converted to voltage and levels such as VCOM are output.
The SID MIX generates binary signals to restrict the first and second levels of the PSIG signal and timing.
The RED I-Q switch, GREEN I-Q switch, and BLUE I-Q switch are composed of two channels (I and R) for each color (to obtain frequency characteristics, data of every other dot is sent by two signal lines). To correct the level difference between channels from the BB board, signals whose left and right sides (LR) have been switched for every H are returned to their original states based on the control signal from the BB board (SELECT). To deal with the changes in the display direction of the panel according to how the unit is installed, the SELECT signal is processed inside the timing generator to generate the SELECT OUT signal and switch I-R.
In the RED amplifier/feedback, GREEN amplifier/feedback, and BLIE amplifier/feedback, the level of the video signal whose L and R have been arranged for panel driving using the I-Q switch is converted to an appropriate input level of the panel driver. Furthermore, comparison with the reference power is performed, feedback for the REF I/O terminal of the D/A comparator on the BB board is performed to perform AGC operations.
In the RED panel driver, GREEN panel driver, and BLUE panel driver, the binary signal for PSIG made in the previous state is line inverted and amplified, and 12-dot sample-holding is performed after line inversion and amplification
for the video signal.
The operations of each block above control and drive the RED, GREEN, and BLUE LCD panels.

3-2-3. C Board Block Diagram


FROM BB BOARD BOARD TO BOARD CONNECTER CN5001
MCLK-P/2, N/2
VSYNC-P, N
HSYNC-P, N
PECL TO TTL LEVEL CONVERTER MC10H350 IC5402
MCLK/2
VSYNC
HSYNC
TIMMING GENERATER ISPLSI1032E IC5403 IC5405 IC5406 CN5401
SDA
SCL
/C RESET
TEMP PROT
FAN PROT
TEMP SENSOR TC7S14F TH5001, IC5005
TO FAN PROT, CN5007, 5008, 5009
D/A CONVERTER MB88141APFV, M62399FP IC5602, 5605
SLFR
SID LEVEL
PRG LEVEL
DWN
R VCOM
G VCOM
B VCOM
POS-CON1, 2, DOT-INV, DLY-CON,
SID-OFSET, SCEN
R D/A I, Q
G D/A I, Q
B D/A I, Q
RED I-R SW ADG736 IC5008
GREEN I-R SW ADG736 IC5009
BLUE I-R SW ADG736 IC5010
R FB
RL, RR
G FB
GL, GR
B FB
BL, BR
RED AMP & FEED BACK UPC814, MAX4117 IC5201, 5204, 5209
GREEN AMP & FEED BACK UPC814, MAX4117 IC5202, 5205, 5210
BLUE AMP & FEED BACK UPC814, MAX4117 IC5203, 5206, 5211
FROM BC BOARD BOARD TO BOARD CONNECTER CN5002
SHIFT+, -
ZOOM+, -
FOCUS+, -
TO LENS MOTOR CN5003
CVR-PROT-CB
TO COVER PROT. (CB)
SPR+, -
TO SPEAKER (R) CN5048
SPL+, -
TO SPEAKER (L) CN5049
13V
17V
5V-4
5V-2
6V
VOLTAGE REGULATER PQ20V21U, PQ20VZ5U, PQ05SZ1U IC5003, 5004, 5005, 5006, 5007
15.5V
13.5V
12V
10V
5V-2
A 5V


PCG, VCK, VST, HST, HCK1, HCK2
ENB
FRP
PRG
SID MIX
MAX4066CEE
IC5606
SID OUT
RL OUT, RR OUT
GL OUT, GR OUT
BL OUT, BR OUT
RED PANEL DRIVER
CXA2112R
IC5806, 5807
GREEN PANEL DRIVER
CXA2112R
IC5607, 5608
BLUE PANEL DRIVER
CXA2112R
IC5802, 5803
R SIG1~12
R-SID OUT
G SIG1~12
G-SID OUT
B SIG1~12
B-SID OUT
CONNECTER
TO RED PANEL
CN5802
CONNECTER
TO GREEN PANEL
CN5601
CONNECTER
TO BLUE PANEL
CN5801

3-2-4. Timing Generator

This circuit is composed of the PLD (IC5403) for generating timings for controlling the LCD panel and IC5404 and IC5406 for buffering with the LCD panel.
Inside the PLD, timings are generated while synchronizing with the H sync and V sync based on the 1/2 CLK.
Refer to the separate sheet for details on the timing.
The meaning of each signal is as follows.
HST: Start pulse for H shift register driving of the LCD panel.
HCK1: Clock for H shift register driving of the LCD panel.
HCK2: Reversal clock of HCK1.
VCK: Clock for V shift register driving of the LCD panel.
VST: Start pulse for V shift register driving of the LCD panel.
PCG: Uniformity improvement pulse of the LCD panel.
ENB: Enable input of the gate selection pulse of the LCD panel.
DIR-CON: Scan direction switching signal (H: Positive scan, L: Reverse scan)
PRG PLS: Pulse for restricting the width of the first stage of the PSIG (uniformity improvement signal of the LCD panel).
FRP: Reversal pulse of the video signal and PSIG
CLP: Video signal clamp pulse of the panel driver input
SELECT OUT: Switching pulse for rearranging the I-Q signal to LR signal.

3-2-5. RED (GREEN, BLUE) Amplifier/Feedback Block

In the following, as the circuit structure of the amplifier and feedback blocks are the same for R, G, and B, only the RED amplifier/feedback is described.
This block is composed of the following circuits.

- Amplifier (IC5201:MAX4117) for converting the level of the video output of the BB board to the appropriate level for the input of IC5806 and IC5807 (CXA2112R) for panel driving of the panel driving block in the next stage.
- Buffer amplifier to the feedback circuit for configuring the D/A converter and AGC on the BB board, and comparator for feedback (IC5209:@micro@PC814).

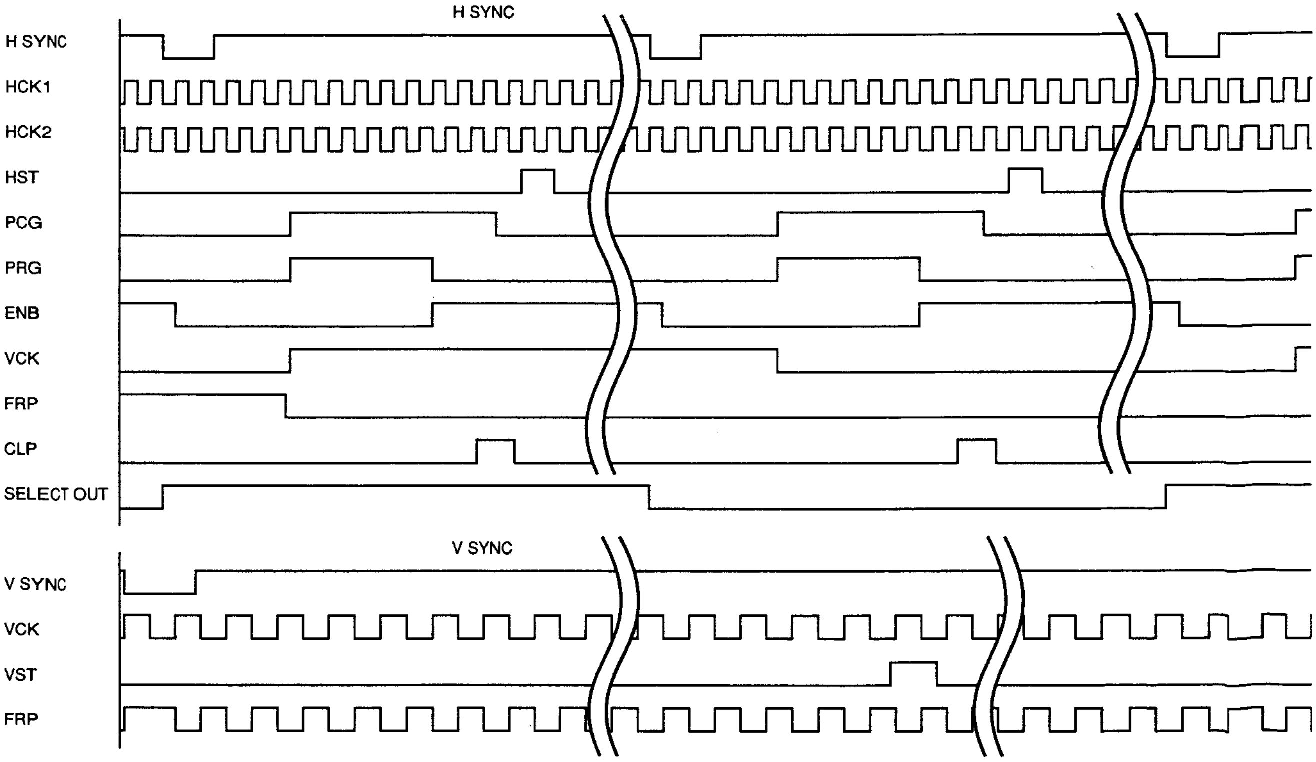
- Analog switch for removing the pedestal level from the video signal for feedback (IC5207: MAX4066CEE: same for R,G,B)
- Creates the reference level for comparing with the pedestal level using the comparator (IC5208: TLV431: same for R,G,B)

In this block, the feedback circuit is processed with only the R channel of L-R. This is because the L-R signal is switched by the H timing from the input of the D/A converter on the BB board to the I-Q switch block.

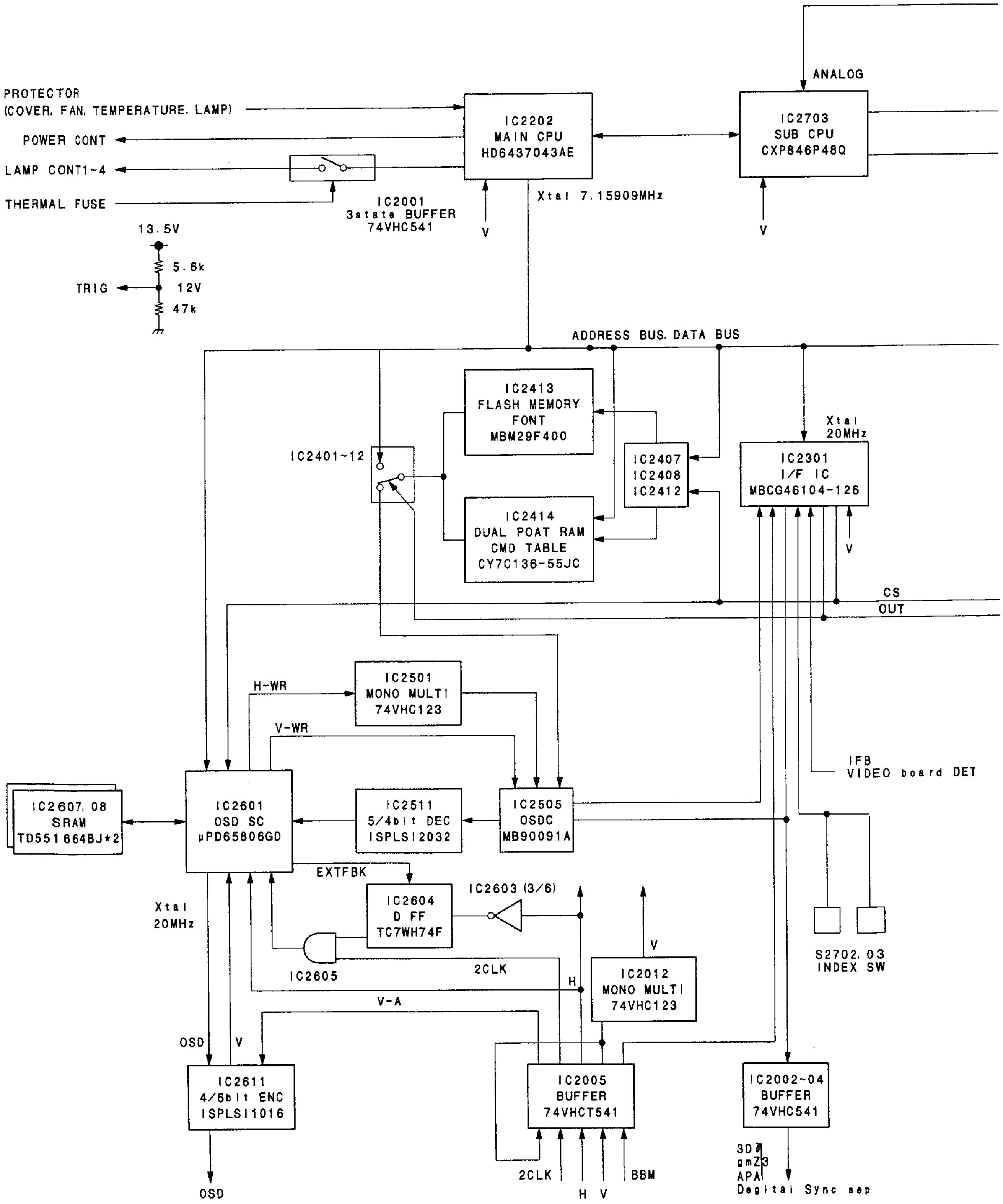
2-2-6. RED (GREEN, BLUE) Panel Drive

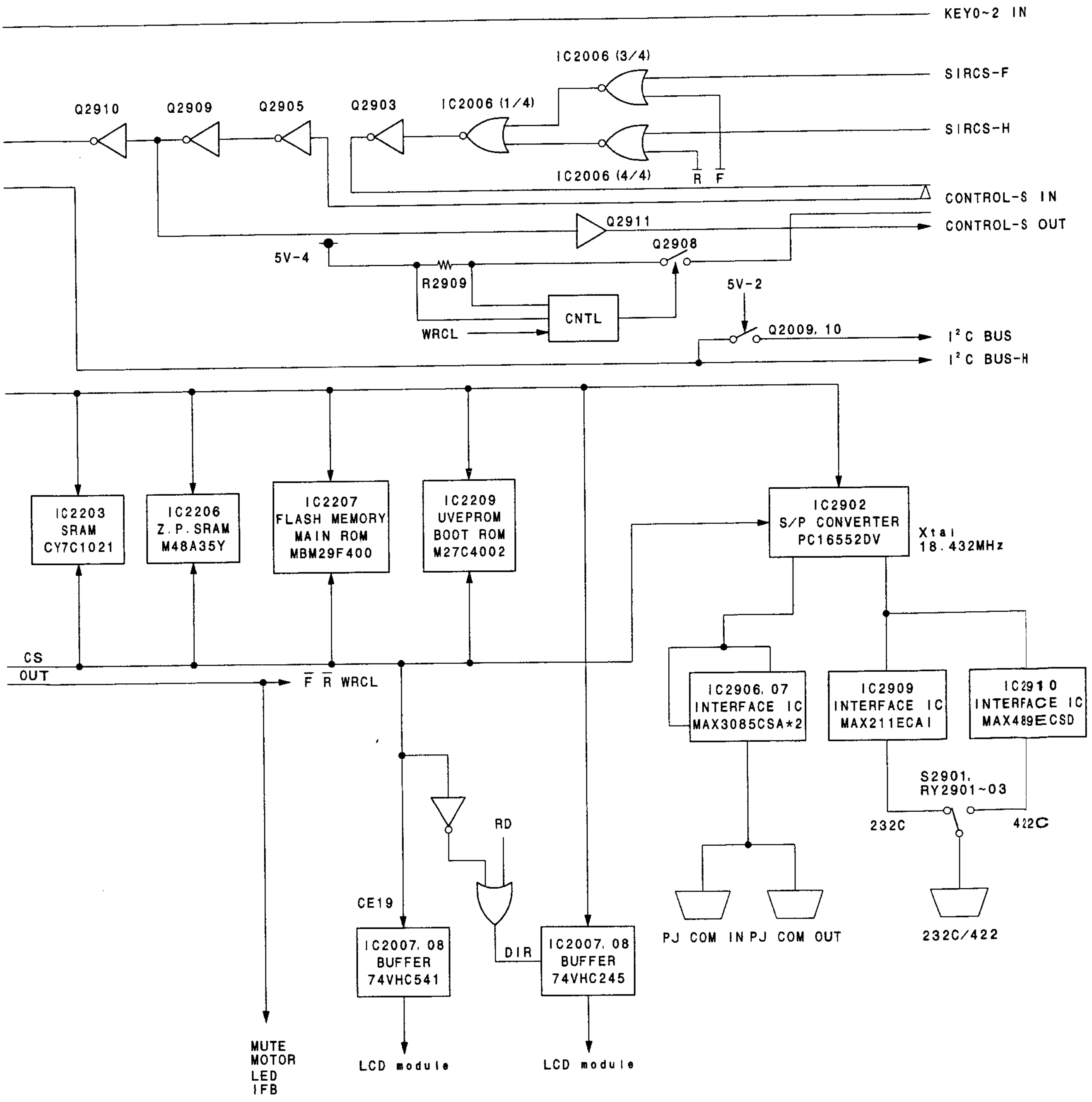
As the panel driver block has the same structure as the R,G, and B blocks, only R is described.
This block is composed with IC5806:CXA2112R and IC5807:CXA2112R) for two panel drivers.
The panel driver IC (CXA2112R) has a function which sample-holds the output of the line reversal amplifier with about 2.7 times gain and line reversal amplifier to 6 dots of the LCD panel, arranges the timing, and outputs to the LCD panel.
The LCD panel (LCX028) used in this unit operates on the 12-dot simultaneous sampling. Two CXA2112Rs are used. The video signal sent from the previous stage by 2-phase are input to the other CXA2112R one phase at a time. To drive the panel connected, the output of two CXA2112Rs are connected to the panel alternately. The binary signal made by the SID MIX block is line reversed and amplified, the PSIG is driven to the LCD panel by the transistor, and controlled by the R VCOM output from the D/A converter block, and the LCD panel is driven by the VCOM from the CXA2112R.

3-2-7. Timing Chart



3-3. M Board Block Diagram


PROTECTOR
(COVER, FAN, TEMPERATURE, LAMP)
POWER CONT
LAMP CONT1~4
THERMAL FUSE
IC2001
3state BUFFER
74VHC541
IC2202
MAIN CPU
HD6437043AE
V
Xtal 7.15909MHz
ANALOG
IC2703
SUB CPU
CXP846P48Q
V
13.5V
5.6k
TRIG
12V
47k
ADDRESS BUS, DATA BUS
IC2413
FLASH MEMORY
FONT
MBM29F400
IC2401~12
IC2407
IC2408
IC2412
IC2414
DUAL POAT RAM
CMD TABLE
CY7C136-55JC
Xtal
20MHz
IC2301
I/F IC
MBCG46104-126
V
CS
OUT
H-WR
IC2501
MONO MULTI
74VHC123
V-WR
IFB
VIDEO board DET
IC2607, 08
SRAM
TD551664BJ*2
IC2601
OSD SC
µPD65806GD
IC2511
5/4bit DEC
ISPLSI2032
IC2505
OSDC
MB90091A
EXTFBK
IC2603 (3/6)
IC2604
D FF
TC7WH74F
Xtal
20MHz
IC2605
2CLK
H
V
IC2012
MONO MULTI
74VHC123
V-A
S2702, 03
INDEX SW
OSD
V
IC2611
4/6bit ENC
ISPLSI1016
IC2005
BUFFER
74VHCT541
IC2002~04
BUFFER
74VHC541
OSD
2CLK
H
V
BBM
3D
gmZ3
APA
Degital Sync sep


KEY0~2 IN
IC2006 (3/4)
SIRCS-F
Q2910
Q2909
Q2905
Q2903
IC2006 (1/4)
SIRCS-H
IC2006 (4/4)
R
F
CONTROL-S IN
Q2911
CONTROL-S OUT
Q2908
5V-4
R2909
CNTL
WRCL
5V-2
Q2009, 10
I²C BUS
I²C BUS-H
IC2203
SRAM
CY7C1021
IC2206
Z.P.SRAM
M48A35Y
IC2207
FLASH MEMORY
MAIN ROM
MBM29F400
IC2209
UVEPROM
BOOT ROM
M27C4002
IC2902
S/P CONVERTER
PC16552DV
Xtal
18.432MHz
CS
OUT
F R WRCL
IC2906, 07
INTERFACE IC
MAX3085CSA*2
IC2909
INTERFACE IC
MAX211ECAI
IC2910
INTERFACE IC
MAX489ECSD
S2901,
RY2901~03
232C
422C
RD
CE19
DIR
IC2007, 08
BUFFER
74VHC541
IC2007, 08
BUFFER
74VHC245
PJ COM IN
PJ COM OUT
232C/422
MUTE
MOTOR
LED
IFB
LCD module
LCD module

Section 4
Electrical Adjustments

4-1. Equipment Required

- Oscilloscope
  Tektronix 2465 or equivalent
  (bandwidth: 350 MHz or more)
- NTSC, PAL, SECAM component signal generator
  Tektronix TG2000 + AVG1 (optionalmodule)
  +AWVG1 (optionalmodule) or equivalent
- VG (Programmable video signal generator)
  VG814 or equivalent
- Digital voltmeter
  Advantest TR6845 or equivalent
- Luminance meter

Note: Perform the following adjustments at least 5 minutes after turning on the power.

4-2. Preparations

4-2-1. Attaching the lens

1. Attach the lens to the optical unit.
2. Press the stopper at the lens side to the stopper at the optical unit side and attach the lens with the 4 screws.
3. Connect the focus and zoom cables.

4-2-2. Turning on the Power

1. Connect the power cord and supply the power.
2. Check that the STANDBY LED of the control panel lights up in red.

4-2-3. Set the service mode.

- Refer to Installation Manual for Dealers.

4-2-4. Set the factory mode.

- When “ENTER,” “ENTER, ” “←, ” and “ENTER” are pressed in the service mode, the screen will ask “do you want to set the factory mode.” Set the factory mode according to the screen.

4-3. C Board Adjustments

4-3-1. SCEN Adjustments

1. Set the service mode.
2. Set the factory mode.
3. Input the XGA 100IRE all white signal to INPUT-A, and select INPUT-A.
4. Connect an oscilloscope to TP5803 of the C board.
5. Set Device Adjust on the menu, select C-P DRV, and press ENTER key.
6. Set SCEN using the ↑ and ↓ keys.
7. Adjust SIGSEN using the ← and → keys so that the 100IRE on the inverted side and 100IRE of the non-inverted side become symmetrical centering around the following voltage.
   From center voltage to GND = 7V ± 0.1V

4-3-2. SID OFST Adjustments

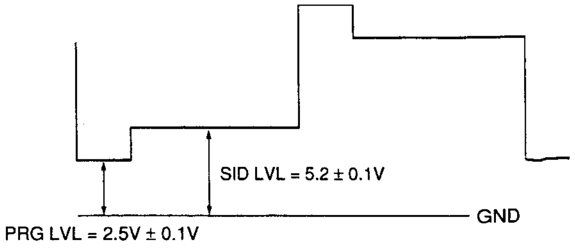
1. Set SID OFST using the ↑ and ↓ keys after completing 4-3-1.
2. Adjust SID OFST using the ← and → keys so that the pedestal level of the non-inverted side becomes the following voltage.
   From pedestal to GND=2.5V ± 0.05V

4-3-3. SID LVL Adjustments

1. Connect the oscilloscope to TP5816.
2. Set SID LVL using the → and ↓ keys and adjust using the ← and → keys so that SID LVL becomes the following voltage.

4-3-4. PRG LVL Adjustment

1. Set PRG LVL using the ↑ and ↓ keys and adjust using the ← and → keys so that PRG LVL becomes the following voltage.
2. Disconnect the probe of the oscilloscope.



4-3-5. R VCOM Adjustments

Turn off the menu using the STATUS OFF during adjustments. (No shield is required.)

1. Set R VCOM and check the 1 line ON/OFF signal.
2. Adjust the ← and → keys to minimize the flicker.

4-3-6. G VCOM Adjustments

1. Set G VCOM and check the 1 line ON/OFF signal.
2. Adjust the ← and → keys to minimize the flicker.

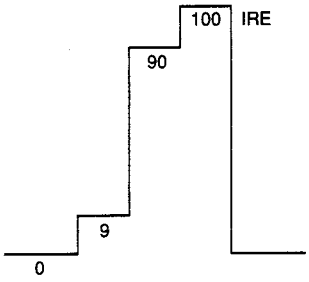
4-3-7. B VCOM Adjustment

1. Set B VCOM and check the 1 line ON/OFF signal.
2. Adjust the ← and → keys to minimize the flicker.

4-4. Signal Level Adjustments

4-4-1. RGB Level Checks

1. Set BA MATRIX of Device adjust on the menu, and set 19 ADJ MODE from 0 to 1.
2. Input the XGA BA adjustment signal to the INPUT-A input.
3. Connect the oscilloscope to TP5803 of the C board.
4. Check that 9IRE and 90IRE are not flat.
5. Set the cursor of the oscilloscope to 9IRE and 90IRE.



Adjust GND to the bottom edge in the DC1V range.

INPUT SIGNAL :

4-4-2. Component Level Adjustments

1. Connect the Component signal to INPUT-A, and select COMPONENT at SIGNAL SELECT.
   (15K component 10 step signal Chroma OFF)
2. Set BA MATRIX of Device adjust at the menu.
3. Select 05 SUB BRT, and adjust using the ← and → keys so that the voltage of 10IRE of the oscilloscope matches the cursor at the bottom.
4. Select 01 PICTURE, and adjust using the ← and → keys so that the voltage of 100IRE of the oscilloscope matches the cursor at the top.
5. Set the signal to the component color bar.
   (15K component color bar Chroma ON)
6. Adjust the cursor at the top of the oscilloscope to the bar on the left side bar (white part).
7. Select 12 YUV COL, and adjust using the ← and → keys so that the levels of the right bar and left bar become the same.
8. Select 04 SUB HUE, and adjust using the ← and → keys so that the two bars at the center become flat.
9. Set the signal to the 10 step signal, and return the cursor at the top to 100IRE.
10. Press the ENTER key to select the SAVE TO MEMORY of the menu, and press the ENTER key again to save the data.

4-4-3. VIDEO NTSC Level Adjustments

1. Input the NTSC 100% Color bar signal to the VIDEO input, and switch the input to VIDEO.
   BA MATRIX of device adjust of the menu is set.
2. Select 11 YUV COM, and adjust using the ← and → keys so that the level of the left bar becomes the same as the level of the cursor at the top.
3. Select 12 YUV COL, and adjust using the ← and → keys so that the levels of the right bar and left bar become the same.
4. Select 04 SUB HUE, and adjust using the ← and → keys so that the two bars at the center become flat.
5. Press the ENTER key to select the SAVE TO MEMORY of the menu, and press the ENTER key again to save the data.

4-4-4. VIDEO PAL Level Adjustments

1. Input the PAL 100% Color bar signal to the VIDEO input.
   BA MATRIX of device adjust on the menu is set.
2. Select 11 YUV COM, and adjust using the ← and → keys so that the level of the left bar becomes the same as the level of the cursor at the top.
3. Select 12 YUV COL, and adjust using the ← and → keys so that the levels of the right bar and left bar become the same.
4. Select 04 SUB HUE, and adjust using the ← and → keys so that the two bars at the center become flat.
5. Press the ENTER key to select the SAVE TO MEMORY of the menu, and press the ENTER key again to save the data.

4-4-5. Y/PB/PR Level Adjustments

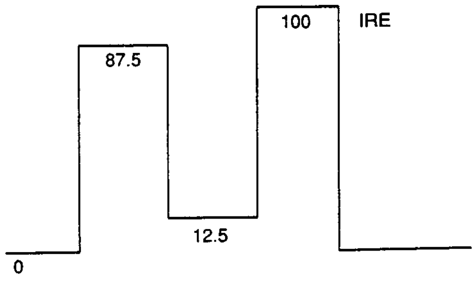
1. Input the HDVS (1080/60i) 100% Color bar (YPbPr) signal to INPUT-A, select INPUT-A, and select Y/PB/PR using SIGNAL SELECT.
2. Set BA MATRIX of Device adjust on the menu.
3. Select 11 YUV COM, and adjust using the ← and → keys so that the level of the left bar becomes the same as the level of the cursor at the top.
4. Select 12 YUV COL, and adjust using the ← and → keys so that the levels of the right bar and left bar become the same.
5. Select 04 SUB HUE, and adjust using the ← and → keys so that the two bars at the center become flat.
6. Press the ENTER key to select the SAVE TO MEMORY of the menu, and press the ENTER key again to save the data.

4-4-6. 15KRGB Level Adjustments

1. Input the 15K RGB 100% Color bar signal to INPUT-A, select INPUT-A, and select RGB using SIGNAL SELECT.
2. Set BA MATRIX on Device adjust on the menu.
3. Select 11 YUV COM, and adjust using the ← and → keys so that the level of the left bar becomes the same as the level of the cursor at the top.
4. Select 12 YUV COL, and adjust using the ← and → keys so that the levels of the right bar and left bar become the same.
5. Select 04 SUB HUE, and adjust using the ← and → keys so that the two bars at the center become flat.
6. Press the ENTER key to select the SAVE TO MEMORY of the menu, and press the ENTER key again to save the data.

4-4-7. W/B HIGH Adjustments

1. Input the W/B HIGH adjustment signal to INPUT-A, and connect an oscilloscope to TP5803.



2. Set BB GAMMA of Device adjust on the menu.
3. Set LEVEL:1, and adjust the cursor at the bottom of the oscilloscope to the same level as the signal.
4. Set LEVEL:7, and adjust the cursor at the top of the oscilloscope to the same level as the signal.
5. Set W/B Adjust HIGH on the menu.
6. Adjust Blue BIAS so that the 12.5IRE part of the W/B HIGH adjustment signal matches the cursor at the bottom of the oscilloscope.
7. Adjust Blue GAIN so that the 87.5IRE part of the W/B HIGH adjustment signal matches the cursor at the top of the oscilloscope.
8. Perform the tracking of (6) and (7).
9. Input the W/B HIGH adjustment signal to INPUT-A, and connect an oscilloscope to TP5605.
10. Set BB GAMMA of Device adjust on the menu.
11. Set LEVEL:1, and adjust the cursor at the bottom of the oscilloscope to the same level as the signal.

12. Set LEVEL:7, and adjust the cursor at the top of the oscilloscope to the same level as the signal.
13. Set WB Adjust HIGH on the menu.
14. Adjust Green BIAS so that the 12.5IRE part of the W/B HIGH adjustment signal matches the cursor at the bottom of the oscilloscope.
15. Adjust Green GAIN so that the 87.5IRE part of the W/B HIGH adjustment signal matches the cursor at the top of the oscilloscope.
16. Perform the tracking of (14) and (15).

Adjust GND to the bottom edge in the DC1V range.
INPUT SIGNAL :

17. Input the W/B HIGH adjustment signal to INPUT-A, and connect an oscilloscope to TP5819.
18. Set BB GAMMA of Device adjust on the menu.
19. Set LEVEL:1, and adjust the cursor at the bottom of the oscilloscope to the same level as the signal.
20. Set LEVEL:7, and adjust the cursor at the top of the oscilloscope to the same level as the signal.
21. Set WB Adjust HIGH on the menu.
22. Adjust Red BIAS so that the 12.5IRE part of the W/B HIGH adjustment signal matches the cursor at the bottom of the oscilloscope.
23. Adjust Red GAIN so that the 87.5IRE part of the W/B HIGH adjustment signal matches the cursor at the top of the oscilloscope.
24. Perform the tracking of 22 and 23.
25. Select SAVE TO MEMORY at the W/B ADJUST page of the menu, press ENTER to save the data.
26. Set Device adjust on the menu, select BA MATRIX, and return the 19 ADJ MODE from 1 to 0.
27. Press the ENTER key to select SAVE TO MEMORY of the menu, and press ENTER key again to save the data.

4-5. Adjustments in Replacement of Prism

After replacement of the prism, set the factory mode, and perform the following adjustment.

4-5-1. VCOM Adjustment

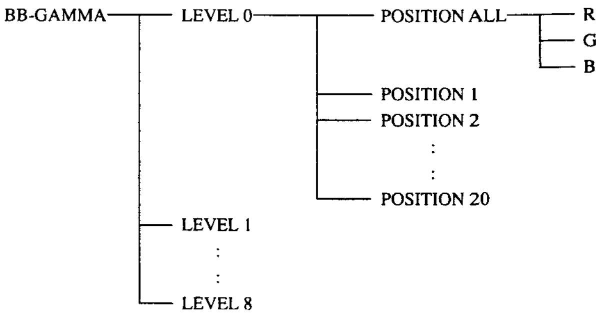
The bottom most menu item on the main menu is the Device Adjustment Menu. Set this menu and select "C-P DRV." Perform V COM adjustments for each of the item "V COM/R," "V COM/G," and "V COM/B."
In the above mode, as the built-in test pattern will be output, adjust so that flicker is minimum throughout the whole screen.

4-5-2. Polarization Plate Adjustment

Select "BB-GAMMA" on the device adjustment menu.
This will display "LEVEL 0" and "POSITION ALL," and the whole screen will become black. In this state, adjust the respective polarization plate until the black becomes the darkest.

4-5-3. 3Dγ Adjustment (Outline)

The principle of 3Dγ is described before the adjustment of 3Dγ.
3Dγ is like a function which can individually adjust W/B at a total of 180 points brightness 9 levels, horizontal direction 6 points, vertical direction 5 points (9*6*5=270 points).
So altogether 540 adjustments (270*3 (RGB)=810) will be required, which is in practice not possible. The following describes a simpler method.
First the "BB-GAMMA" menu consists of the following hierarchy.



When adjusting a certain LEVEL, automatically the internal signal (flat field) of that level will be displayed.

4-5-4. 3Dγ Adjustments

1. First input "BB-GAMMA."
2. Set LEVEL to 1.
3. Study the uniformity of the whole screen, and locate the areas where uniformity is poor.
4. Changing "POSITION" to 1, 2, or 3 will display the cursor. The position of the cursor is the position which will be adjusted.
   Move the cursor to the area with poor uniformity.
5. Move "R" and "B" up and down, and adjust so that the uniformity is the same as the other areas.
6. Set LEVEL 2.
7. Like steps 3, 4, and 5, adjust the areas with poor uniformity.
8. Adjust up to LEVEL 7.
9. Study the test pattern from LEVEL 1 to LEVEL 7, and if no problems, return to the first hierarchy, adjust the device, and save the data in SAVE TO MEMORY.

Precautions:

1. Basically adjust RED and BLUE only without changing GREEN.
2. Do not change POSITION ALL.
3. Do not adjust LEVEL 0 and LEVEL 8.
4. To set back factory settings should adjustments fail, skip "SAVE TO MEMORY," press the STANDBY key, and turn off the power. All the adjusted data will be set back to factory settings.
   Factory settings cannot be set back however if "SAVE TO MEMORY" has already been implemented. So check the picture quality carefully prior to implementing "SAVE TO MEMORY."
5. For zoom lens, the uniformity will change slightly according to the zoom position.
   As uniformity will change slightly according to the F number of the lens, perform the adjustments on the projection system under the normal using conditions.
6. Do not change other items in the Device Adjust Menu.
   The device adjust menu contains important parameters for machine operations.
   Unnecessary operations will result in "no image" and "abnormal image."
   "Factory reset" cannot be performed on device adjust menu items.
   (Implementing SAVE TO MEMORY will completely overwrite the data.)
   Do not change data unnecessarily.

4-5-5. W/B LOW Adjustments

1. Switch the INPUT-A input signal to the VGA 80 IRE flat field signal, and set to COLOR TEMP LOW. Set GAIN R, G, B and BIAS R, G, B to the same value as the HIGH data.
2. Next increase the value of Red GAIN by 25.
3. Perform tracking so that the following specification is satisfied.
   Adjust G and B without changing Red GAIN.
   80 IRE White Chrominance
   <Specification> (x, y)=(0.300 ± 0.003, 0.330 ± 0.003)
4. Switch the INPUT-A input signal to the VGA 20 IRE flat field signal.
5. Adjust the W/B adjust BIAS G and BIAS B data so that the chrominance of white section satisfies the following specification.
   20 IRE White Chrominance
   <Specification> (x, y)=(0.300 ± 0.003, 0.330 ± 0.003)
6. Switch the INPUT-A input signal to the VGA 80 IRE flat field signal.
7. Adjust the W/B adjust BIAS G and BIAS B data so that the white chrominance satisfies the following specification.
   80 IRE White Chrominance
   <Specification> (x, y)=(0.300 ± 0.003, 0.330 ± 0.003)
8. Repeat steps 4 to 7 to perform tracking so that the specification is satisfied.

4-6. M Board Adjustments

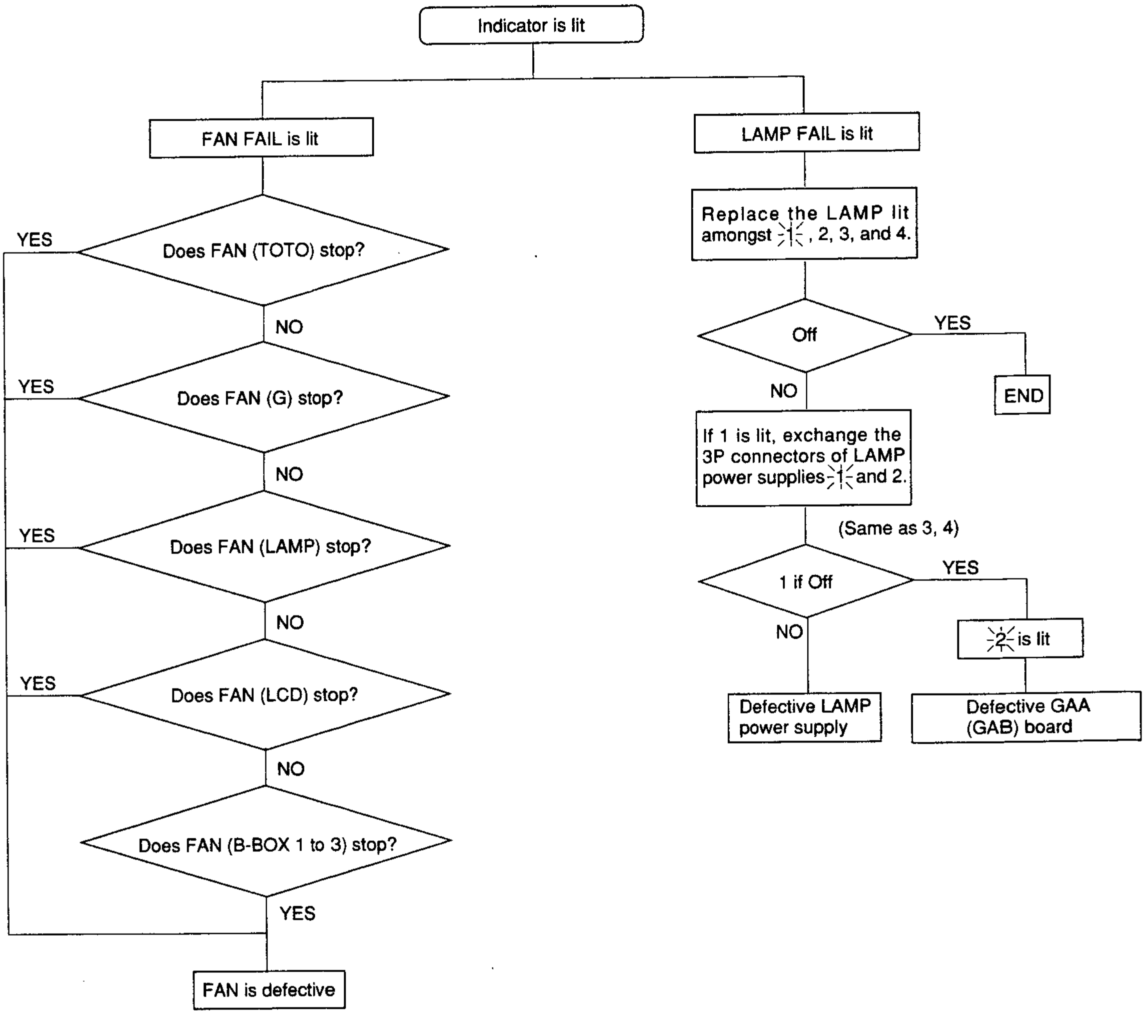
4-6-1. Current Detection 0 Set Adjustment

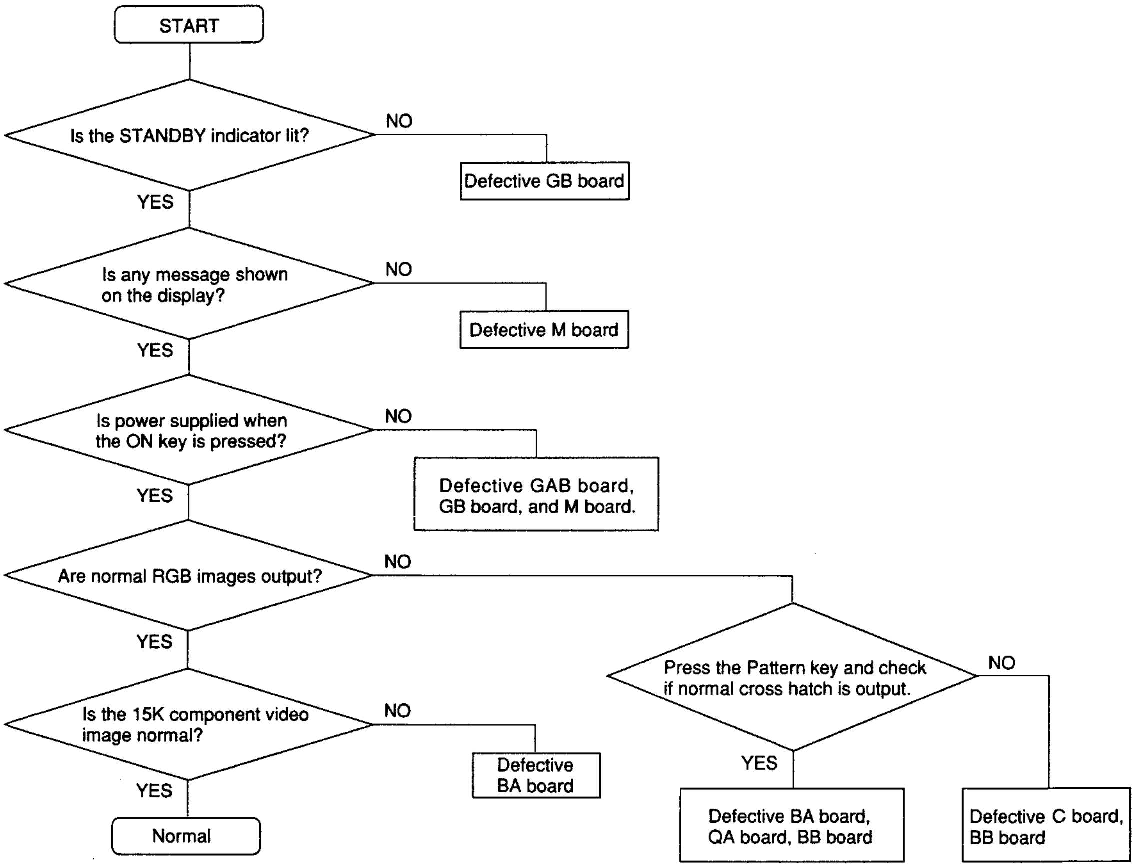
Set CONTROL-S IN to no load.
Adjust RV2901 so that TP2901 (0 set) becomes 30 mV ± 10 mV.

Section 5
Troubleshooting

As most of the boards of VPL-FE100U/FE100E/FE100M are of the slot type, the following are flowcharts for checking "which board is defective" the fastest.
The flowcharts show highly probable malfunctions, so that may not be useful for all defects.
Where more than 2 defective boards are indicated, the first board is more likely to become defective.

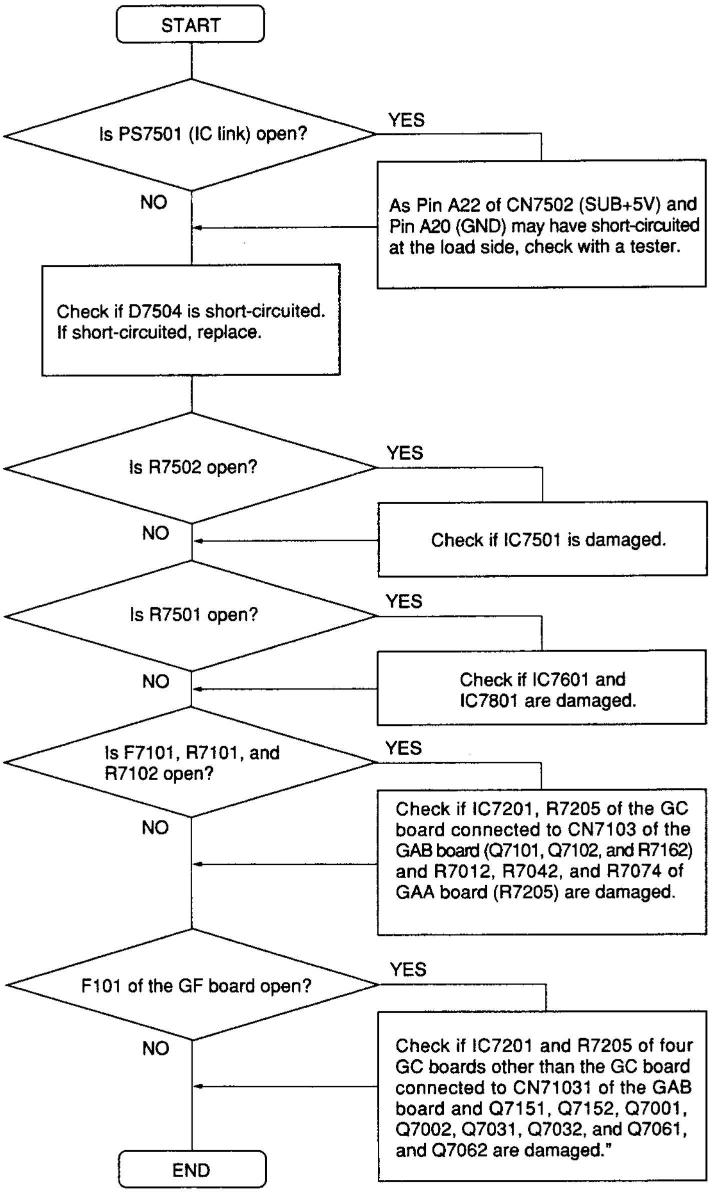
5-1. Indicator Section Troubleshooting


Indicator is lit
FAN FAIL is lit
Does FAN (TOTO) stop?
YES
NO
Does FAN (G) stop?
YES
NO
Does FAN (LAMP) stop?
YES
NO
Does FAN (LCD) stop?
YES
NO
Does FAN (B-BOX 1 to 3) stop?
YES
FAN is defective
LAMP FAIL is lit
Replace the LAMP lit amongst 1, 2, 3, and 4.
Off
YES
END
NO
If 1 is lit, exchange the 3P connectors of LAMP power supplies 1 and 2.
(Same as 3, 4)
1 if Off
YES
2 is lit
NO
Defective LAMP power supply
Defective GAA (GAB) board

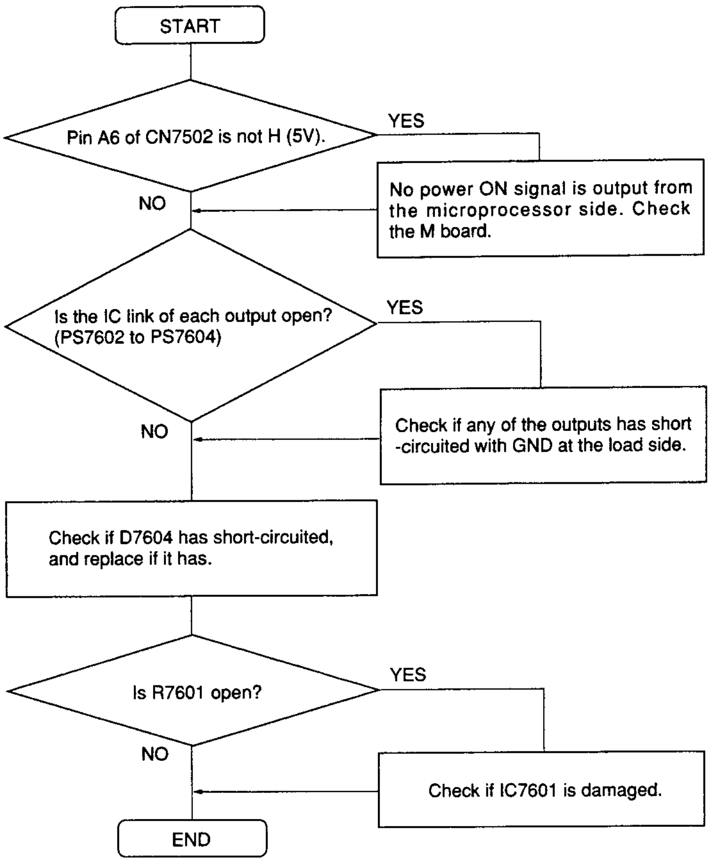

START
Is the STANDBY indicator lit?
NO
Defective GB board
YES
Is any message shown on the display?
NO
Defective M board
YES
Is power supplied when the ON key is pressed?
NO
Defective GAB board, GB board, and M board.
YES
Are normal RGB images output?
NO
Press the Pattern key and check if normal cross hatch is output.
NO
YES
Defective BA board, QA board, BB board
Defective C board, BB board
YES
Is the 15K component video image normal?
NO
Defective BA board
YES
Normal

5-2. Power Supply Section Troubleshooting

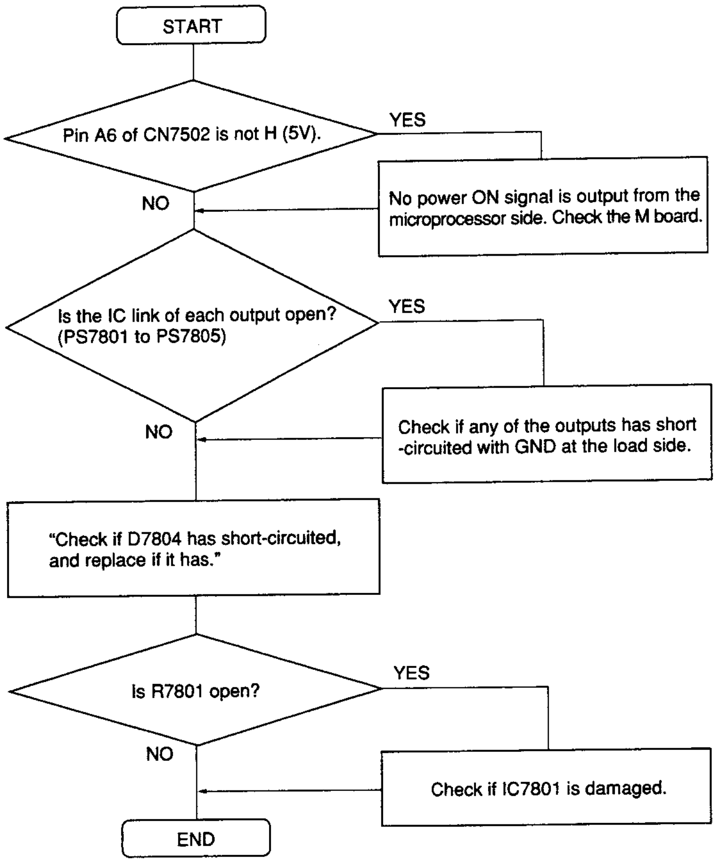
(1) If the unit does not set into the standby state even when connected to an AC outlet.
(The standby LED on the control panel does not light up.)


START
Is PS7501 (IC link) open?
YES
As Pin A22 of CN7502 (SUB+5V) and Pin A20 (GND) may have short-circuited at the load side, check with a tester.
NO
Check if D7504 is short-circuited. If short-circuited, replace.
Is R7502 open?
YES
Check if IC7501 is damaged.
NO
Is R7501 open?
YES
Check if IC7601 and IC7801 are damaged.
NO
Is F7101, R7101, and R7102 open?
YES
Check if IC7201, R7205 of the GC board connected to CN7103 of the GAB board (Q7101, Q7102, and R7162) and R7012, R7042, and R7074 of GAA board (R7205) are damaged.
NO
F101 of the GF board open?
YES
Check if IC7201 and R7205 of four GC boards other than the GC board connected to CN71031 of the GAB board and Q7151, Q7152, Q7001, Q7002, Q7031, Q7032, and Q7061, and Q7062 are damaged."
NO
END

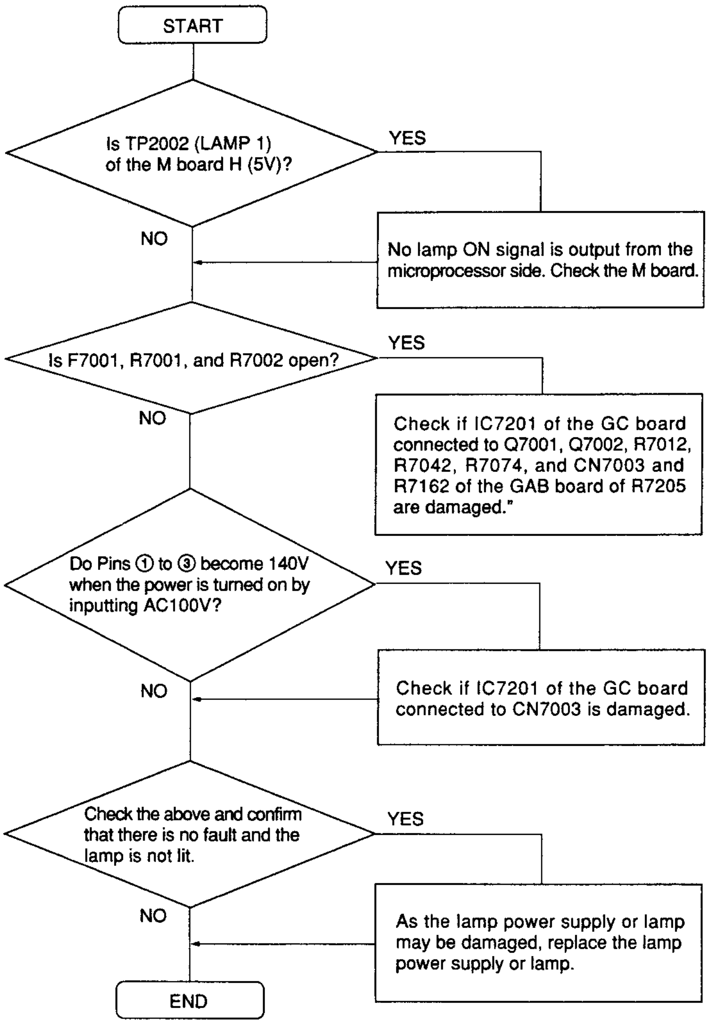
(2) The standby power is output, but no power from the analog circuit (+6.2V, 13.5V, 17V) is output even if the power is turned ON.


START
Pin A6 of CN7502 is not H (5V).
YES
No power ON signal is output from the microprocessor side. Check the M board.
NO
Is the IC link of each output open? (PS7602 to PS7604)
YES
Check if any of the outputs has short -circuited with GND at the load side.
NO
Check if D7604 has short-circuited, and replace if it has.
Is R7601 open?
YES
Check if IC7601 is damaged.
NO
END

(3) The standby power is output, but no digital circuit power (+3.3V, +5.2V, —5.2V, —2V, AUDIO+B is output even when the power is ON.

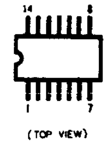

START
Pin A6 of CN7502 is not H (5V).
YES
No power ON signal is output from the microprocessor side. Check the M board.
NO
Is the IC link of each output open? (PS7801 to PS7805)
YES
Check if any of the outputs has short -circuited with GND at the load side.
NO
"Check if D7804 has short-circuited, and replace if it has."
Is R7801 open?
YES
Check if IC7801 is damaged.
NO
END

(4) The lamp does not light up although the standby, analog power, and digital power are output.
(This unit has four circuits each for the lamp power supply and active filter for the lamp power supply. As all of these circuits are the same, only the circuit of lamp 1 will be described here.)

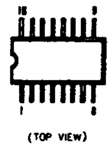

START
Is TP2002 (LAMP 1) of the M board H (5V)?
YES
No lamp ON signal is output from the microprocessor side. Check the M board.
NO
Is F7001, R7001, and R7002 open?
YES
Check if IC7201 of the GC board connected to Q7001, Q7002, R7012, R7042, R7074, and CN7003 and R7162 of the GAB board of R7205 are damaged."
NO
Do Pins ① to ③ become 140V when the power is turned on by inputting AC100V?
YES
Check if IC7201 of the GC board connected to CN7003 is damaged.
NO
Check the above and confirm that there is no fault and the lamp is not lit.
YES
As the lamp power supply or lamp may be damaged, replace the lamp power supply or lamp.
NO
END

Section 6
Semiconductors

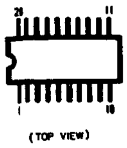
74LCX08MTCX
74LCX32MTCX
74LCX74MTCX
MAX489ECSD-TE2
NJM2901M-TE2
NJM2904M
PC74HC08D-T
PC74HC14D-T
PC74HC32D-T
SN74HCU04ANS-E20
TC74VHC02AF
TC74VHC02F
TC74VHC08F
TC74VHC32F
TC74VHCT04AF
TC74VHCT04F
TLC2932IPW-E20
TLC2933IPW-E20


14
8
1
7
(TOP VIEW)

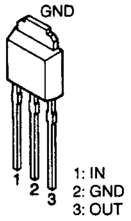
74LCX157MTCX


16
9
1
8
(TOP VIEW)

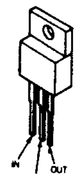
74LVT244MTC
74LCX541MTCX
74LCX574MTCX
IMISM530AYB-D
M62399FP-TE2
M74F244MEL
MC100EL91DWR2
MC10H351MEL
MC74F244MEL
TC74VHC240F
TC74VHC244F
TC74VHC245F
TC74VHC541F
TC74VHCT244AF
TC74VHCT541AF
TC74VHCT541AFT
TDA7315D013TR


20
11
1
10
(TOP VIEW)

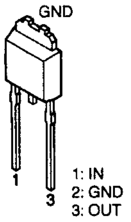
BA05FP-E2
BA09FP-E2
BA12FP-E2


GND
1
2
3
1: IN
2: GND
3: OUT

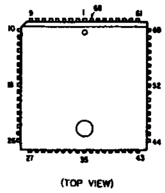
BA12T



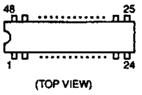
BS05FP
TA78109F


GND
1
3
1: IN
2: GND
3: OUT

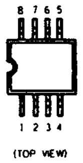
CXA1166K


9
1
68
61
10
60
52
26
44
27
35
43
(TOP VIEW)

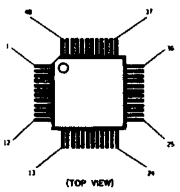
CY7C136-55JC


48
25
1
24
(TOP VIEW)

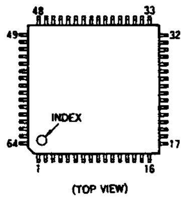
CXA1211M-T4
CXA1450M-T4
GS4981CTA
LM358P
LT13761S8
MAX3085CSA-TG068
MAX4121CSA-TE2
MAX4117ESA
MM1112XFBE
NJM2235M-T1
NJM2240M
NJM2533M
NJM4558E
OPA2658U/2K5
OPA658U-T2
SN75157
TC7W00FU
TC7W04F
TC7W04FU
TC7W08FU
TC7W32F
TC7W74F
TC7WU04FU
TL082CPS-E20
TL431BCDR2
UPC358G2-T2


8 7 6 5
1 2 3 4
(TOP VIEW)

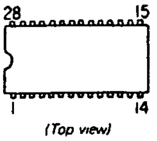
CXA1839Q-T6
CXA1855Q
CXA3106AQ
CXA3197R
CXA3266Q
H1S5728IN
ISPLSI2032-80LT48-M01V1


48
37
1
36
12
25
13
24
(TOP VIEW)

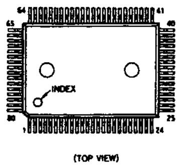
CXA2011Q
CXA2112R-T6


48
33
49
32
INDEX
64
17
1
16
(TOP VIEW)

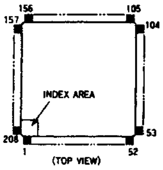
CXA2119M
M48Z35Y-70PCI
MN47V77ST1


28
15
1
14
(Top view)

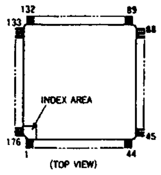
CXA2101AQ
CXD2024AQ
CXP846P48Q-1


64
41
65
40
INDEX
80
25
1
24
(TOP VIEW)

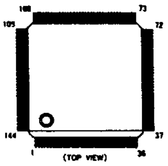
CXD2062Q
CXD2070Q
CXD2082
CXD2083
CXD2084
CXD8760FQ
GMZ1AH2B
GMZ3CH2
UPD65806GD-064-ML


156
105
157
104
INDEX AREA
208
53
1
52
(TOP VIEW)

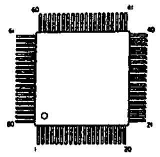
CXD2071R


132
89
133
88
INDEX AREA
176
45
1
44
(TOP VIEW)

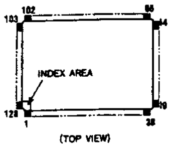
CXD8675R
CXD8773R
HD6437043AE00F
IP90C63


108
73
105
72
144
37
1
36
(TOP VIEW)

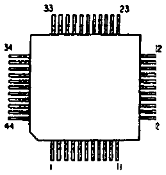
CXD8774R


60
41
61
40
80
21
1
20

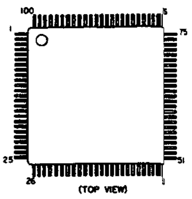
CXG8007TQ


102
103
INDEX AREA
128
1
38
(TOP VIEW)

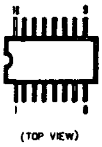
CY7C1021-20ZC
IDT71016S15Y-TL
ISPLSI1016E-80LT44-
BB01V1
ISPLSI1016E-80LT44-
BB02V1
ISPLSI1016E-80LT44-
C01V1
ISPLSI1016E-80LT44
N01V1


33
23
34
22
44
12
1
11

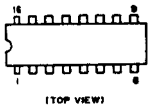
ISPGDX80A-7T100
BB04V1
ISPLSI1032E-100LT-
C01V1


100
1
75
25
26
51
(TOP VIEW)

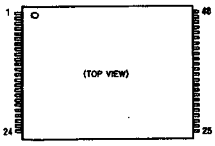
EL4093CS-TE2
MAX4066CEE-TE2
MC10H101MEL
MC10H116MEL
MC10H124MEL
MC10H125MEL
MC10H350P
MC74HC4052F-T2
MC74HC4053F-T2
MC74HC4538AF-T2
PC74HC123D-T
TC74LCX138FT
TC74VHC123AF
TC74VHC153F
TDA4665T-T


16
9
1
8
(TOP VIEW)

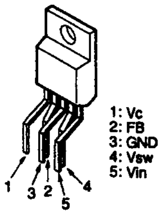
FA5331P


16
9
1
8
(TOP VIEW)

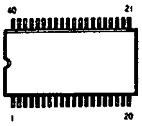
L7809CV


1
48
(TOP VIEW)
24
25

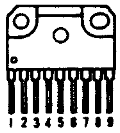
LT1269CT


1: Vc
2: FB
3: GND
4: Vsw
5: Vin
1
3
2
5
4

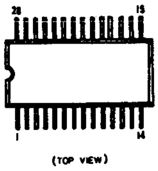
M27C4002-10F1
MBM29LV002T-SX1647
MSM514265C-60JSDR1



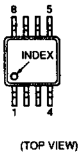
M54544AL



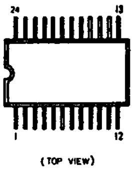
MAX211ECAI-TE2


28
15
1
14
(TOP VIEW)

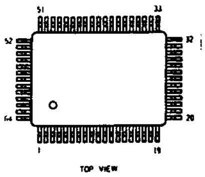
MAX4223ESA-TG08


8
5
INDEX
1
4
(TOP VIEW)

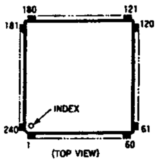
MB81G163222-80
MB88141APFV-ER
UPC659AGS-E2


24
13
1
12
(TOP VIEW)

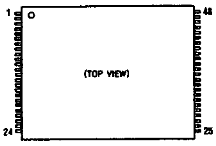
MB90091APF-116


51
33
52
32
64
20
1
19
TOP VIEW

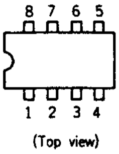
MBCG46104-120PFV


180
121
181
120
INDEX
240
61
1
60
(TOP VIEW)

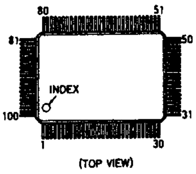
MBM29F200BA-70PFTN
MBM29F400BA-70PFTN


1
48
(TOP VIEW)
24
25

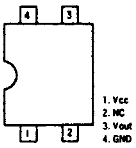
MM1170BFB
UPC814G2-E2


8 7 6 5
1 2 3 4
(Top view)

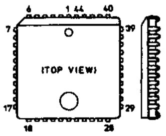
NM5283206FP
UPD64081BGF-3BA


80
51
81
50
INDEX
100
31
1
30
(TOP VIEW)

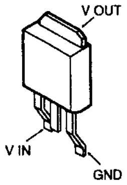
PC123FY2


4
3
1
2
1. Vcc
2. NC
3. Vout
4. GND

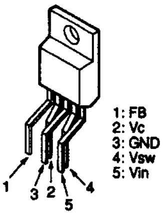
PC16552DV


6
1
44
40
7
39
(TOP VIEW)
17
29
18
28

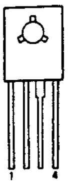
PQ05SZ1U


V OUT
V IN
GND

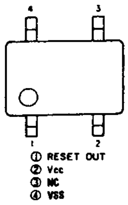
PQ20VZ1U
PQ20VZ5U


1: FB
2: Vc
3: GND
4: Vsw
5: Vin
1
3
2
5
4

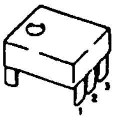
PQ30RV11



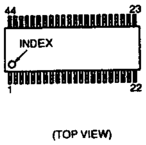
S-80828ANNP-EDR-T2


4
3
1
2
① RESET OUT
② Vcc
③ NC
④ VSS

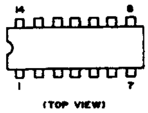
SBX1780-51



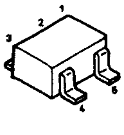
TC551664BJ-15 (EL)


44
23
INDEX
1
22
(TOP VIEW)

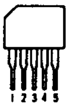
TC74HC04AF
TC74HC08AF
TC74HC32AF


14
8
1
7
(TOP VIEW)

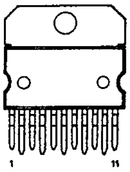
TC7S04FU
TC7S08FU
TC7S14F
TC7S86FU
TC7SET08FU
TC7SH08F-TE85R
TC7SH32F-TE85R



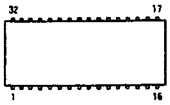
TC7SH04F



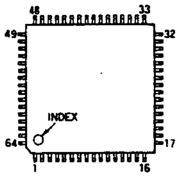
TDA2009A



TDA9141-N2C

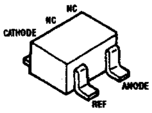


TLC5733AIPM

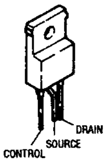

48
33
49
32
INDEX
64
17
1
16

(TOP VIEW)

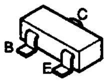
TLV431ACDBV2


NC
CATHODE
ANODE
REF

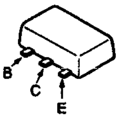
TOP224Y-BB
TOP226Y-BB
TOP227Y-BB


DRAIN
SOURCE
CONTROL

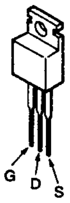
2SA1162-YG-TE85L
2SA1462
2SB1440S-TX
2SC2712-YG-TE85L
2SC2859-Y-TE-85L
2SC3326N
2SC3545
2SC3624A
DTA144EKA-T146
DTC114EKA-T146
DTC144EKA-T146



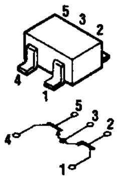
2SA1182-Y
2SB798



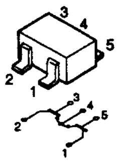
2SK3013F-02



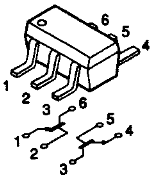
FMS1-T-148


5 3 2
4
1
5 3 2
4
1

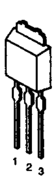
FMW1-T-148


3 4
5
2
1
3 4
5
2
1

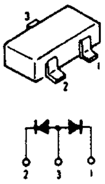
HN1B01FU-TE85R


6 5
4
1
2
3
6
5
4
1
2
3

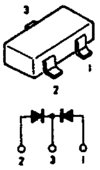
TA78M09F (TE16L)



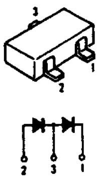
1S2836-T1



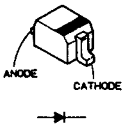
1S2837-T1
DAN202K-T-146



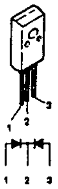
1SS123-T1
MA157-TX



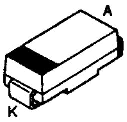
1SS355TE-17
RD13SB2-T1
RD9.1SB2-T1
UDZ-TE-17-3.9B


ANODE
CATHODE

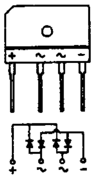
D10SC9M



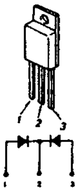
D1FS4A-TA



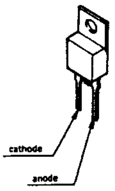
D6SB80



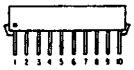
F16P20FS
FCH20A10
FCQ20A04



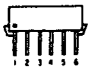
FSF10A60


cathode
anode

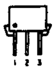
MU03-2205


1 2 3 4 5 6 7 8 9 10

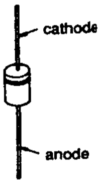
MU04-2105



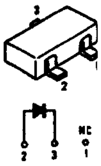
MU04-3101



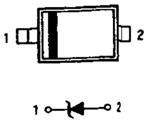
P6KE200AG23


cathode
anode

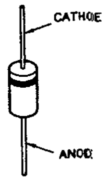
RD10M-T1B2
RD12M-T1B2



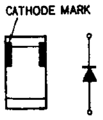
RD5.6SB2-T1



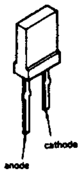
RGP10G
RGP10JPKG23


CATHODE
ANODE

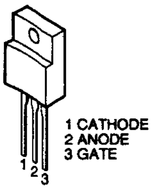
SEC1401C
SEC1901C


CATHODE MARK

SLP-155B-81
SLP-255B-81


cathode
anode

TF861S


1 CATHODE
2 ANODE
3 GATE
1
2
3

Section 7
Exploded Views

NOTE :

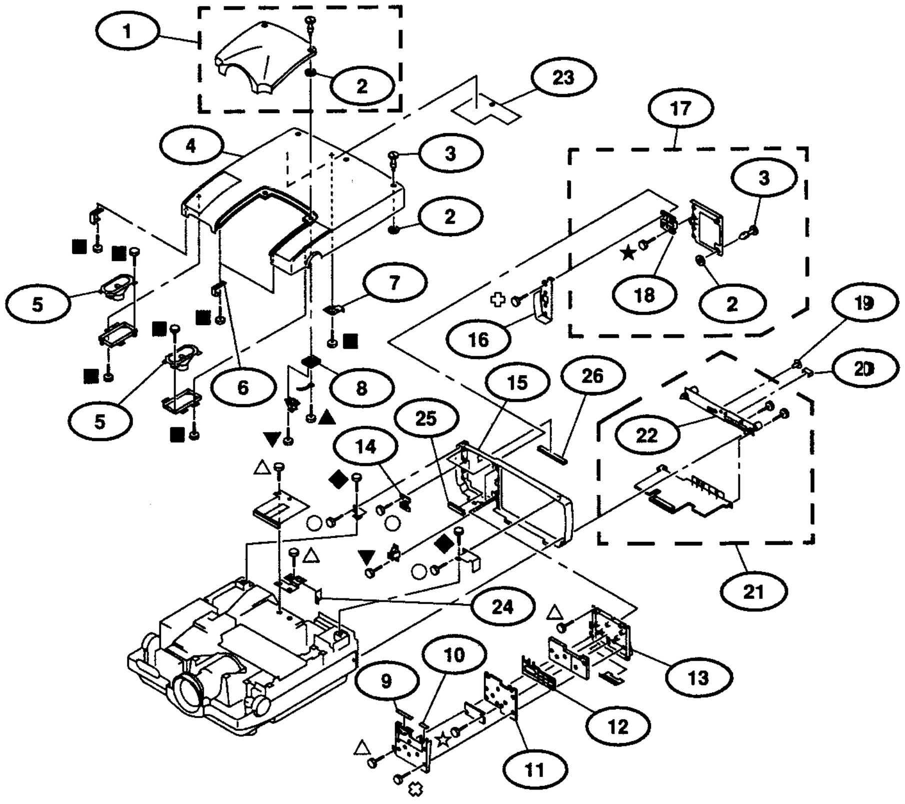
The components identified marked ⚠ are critical for safety.
Replace only with the part number specified.

Les composants identifiés par la marque ⚠ sont critiques pour la sécurité.
Ne les remplacer que par une pièce portant le numéro spécifié.

- Items marked " * " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- Items with no part number and no description are not stocked because they are seldom required for routine service.
- The construction parts of an assembled part are indicated with a collation number in the remarks column.

7-1. Hood, Rear Panel Block

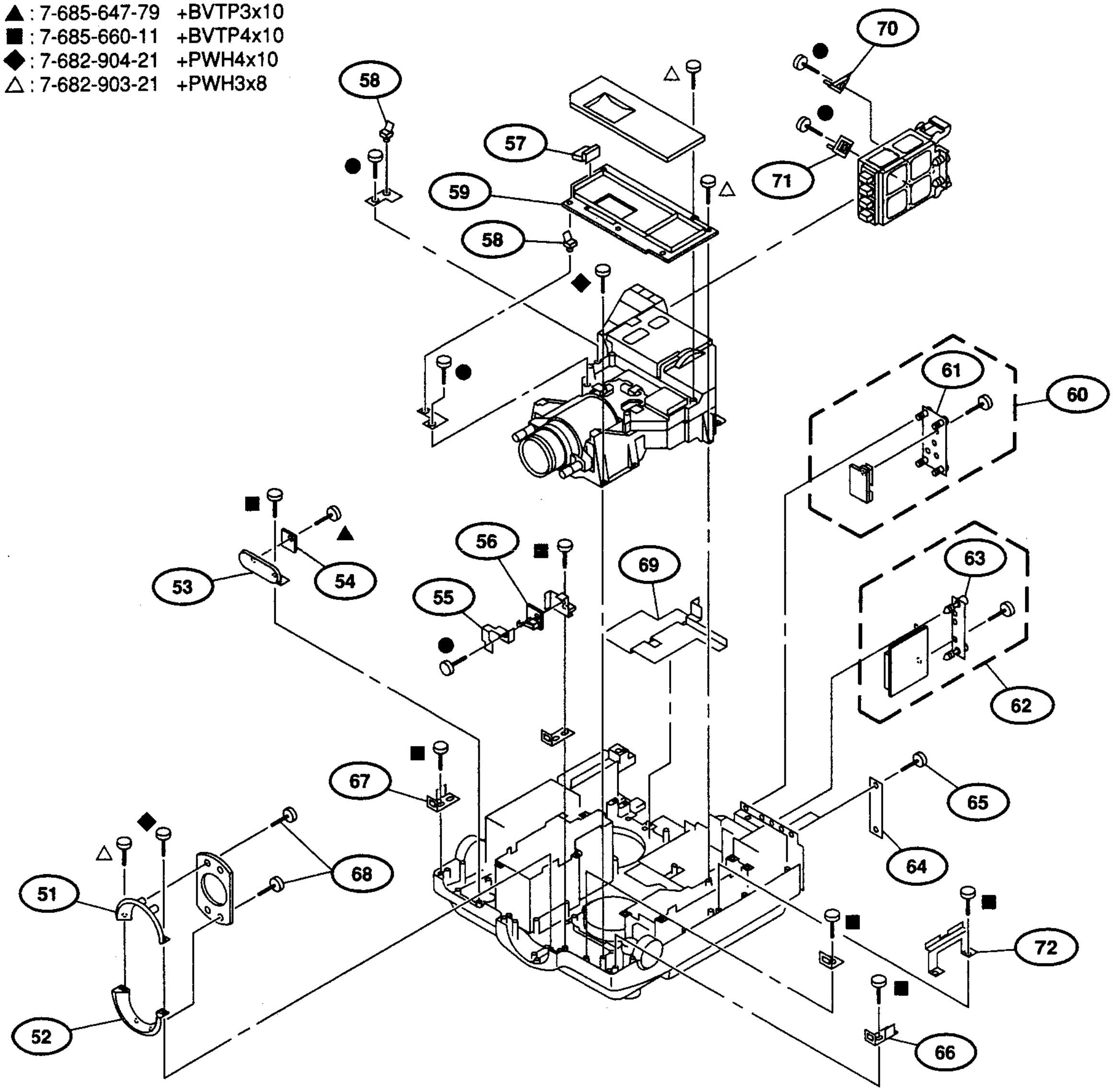
● : 7-682-148-01 +P3x8
▲ : 7-685-647-79 +BVTP3x10
▼ : 7-627-553-17 +P2x2
■ : 7-685-660-11 +BVTP4x10
◆ : 7-682-904-21 +PWH4x10
★ : 7-685-648-79 +BVTP3x12
○ : 7-682-546-04 +P3x5
△ : 7-682-903-21 +PWH3x8
✙ : 7-682-903-41 +PWH3x12
✤ : 7-685-651-79 +BVTP3x20
☆ : 7-685-133-01 +P2.6x6



REF NO.	PART NO.	DESCRIPTION	REMARK
1	* A-1484-218-A	COVER BLOCK ASSY, LENS	2
2	* 4-056-505-01	RING, RUBBER	
3	* 4-068-049-01	FASTENER	
4	* X-4036-944-1	HOOD ASSY	
5	1-504-673-11	SPEAKER (12.6X5.7CM)	
6	* 4-068-058-01	HOLDER (B), HOOD	
7	* 4-068-050-01	BRACKET (A), CABINET	
8	* 4-068-087-01	PLATE(C), FASNER	
9	* 4-068-064-01	GASKET (L)	
10	* 4-068-065-01	GASKET (S)	
11	* A-1375-192-A	H COMPL	
12	* 4-068-138-01	SPACER, CONTROL	
13	* X-4036-254-2	PANEL ASSY, CONTROL	
14	* 1-675-362-11	PWB, UA	
15	* 4-068-154-12	PANEL, REAR	
16	* 4-068-103-03	GUARD (C), LIGHTING	
17	* X-4036-945-1	LID ASSY, LAMP	2, 3, 18
18	4-055-964-01	HINGE, BLIND	
19	3-728-267-01	COVER, 3.5 JACK	
20	* 3-673-948-11	CAP, DUST	
21	* A-1306-578-A	M COMPL	22
22	* X-4036-255-1	PANEL (M) ASSY, REAR	
23	4-068-331-02	SHEET (A), HEAT	
24	* 4-068-403-01	GUARD (I), LIGHTING	
25	* 4-068-822-01	SHEET, FILTER	
26	* 4-068-464-01	GUARD (K), LIGHTING	

7-2. Chassis Block 1

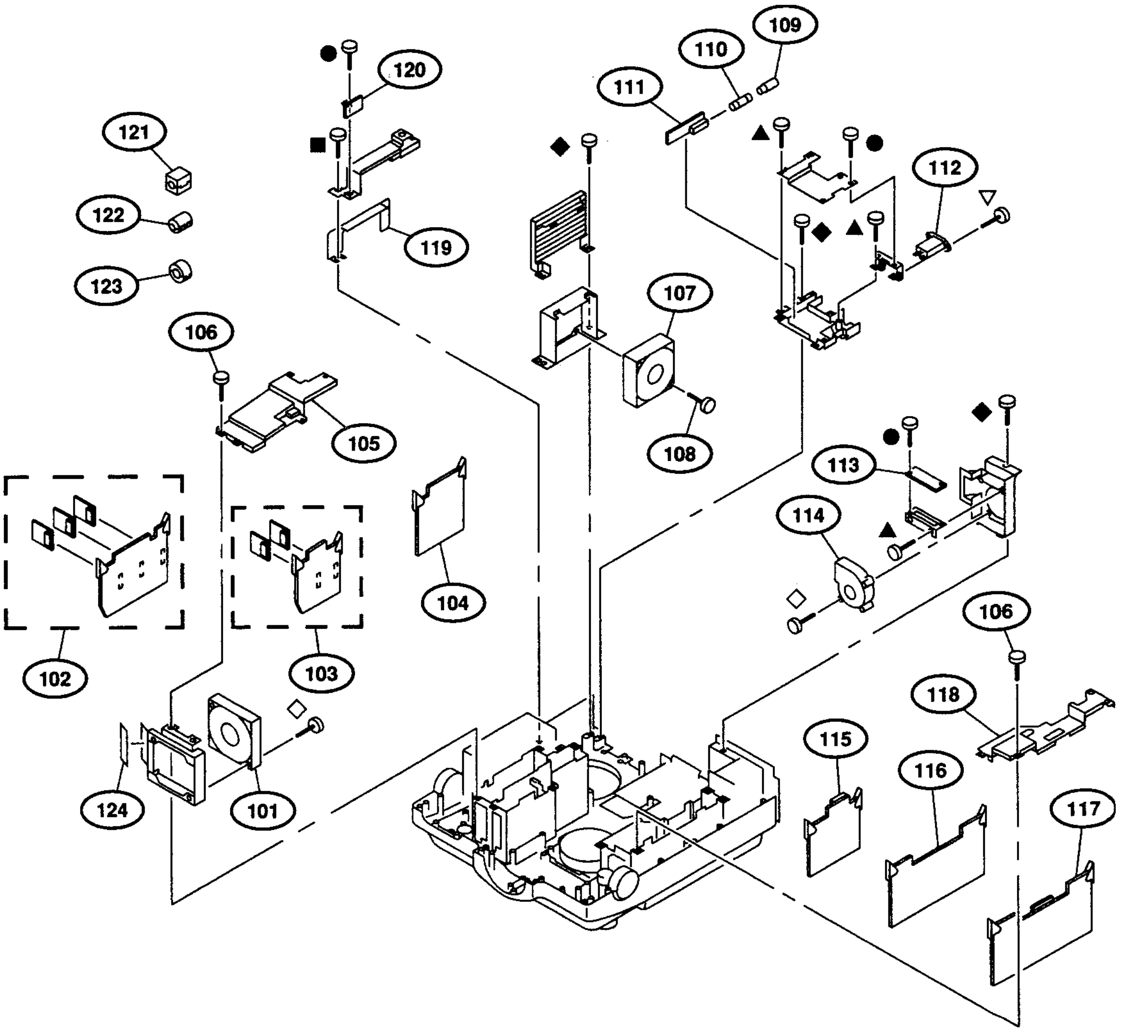
● : 7-682-148-01 +P3x8
▲ : 7-685-647-79 +BVTP3x10
■ : 7-685-660-11 +BVTP4x10
◆ : 7-682-904-21 +PWH4x10
△ : 7-682-903-21 +PWH3x8



REF NO.	PART NO.	DESCRIPTION	REMARK
51	4-068-167-01	RING (A), LENS	
52	4-068-168-01	RING (B), LENS	
53	* X-4036-251-1	WINDOW (F) ASSY, AF	
54	* A-1390-961-A	N MOUNT	
55	* 4-068-067-02	SPRING, UC	
56	* 1-675-364-11	PWB, UC	
57	* 4-068-799-01	SPRING (CG)	
58	* 3-696-440-11	HOLDER (B), PC BOARD	
59	* A-1335-120-A	C COMPL	
60	* A-1275-161-A	QB COMPL (FE100U/FE100M)	61
	* A-1275-166-A	QB COMPL (FE100E)	61
61	* X-4036-248-1	PANEL (QB) ASSY, REAR (FE100U/FE100M)	
	* X-4036-245-1	PANEL (QB/E) ASSY, REAR (FE100E)	
62	* A-1275-177-A	QA COMPL	63
63	* X-4036-247-1	PANEL (QA) ASSY, REAR	
64	4-035-771-01	PLATE, BLIND	
65	4-396-203-01	SCREW (+B M3X12), PREVENTION	
66	* 4-069-085-01	BRACKET (C), FRONT	
67	* 4-069-086-01	BRACKET (D), FRONT	
68	4-068-063-02	SCREW, WASHER	
69	* 4-068-536-04	GUARD (M), LIGHTING	
70	4-068-109-01	BUSHING (B), LAMP	
71	4-068-108-01	BUSHING (A), LAMP	
72	* 4-069-638-01	SPRING (CB)	

7-3. Chassis Block 2

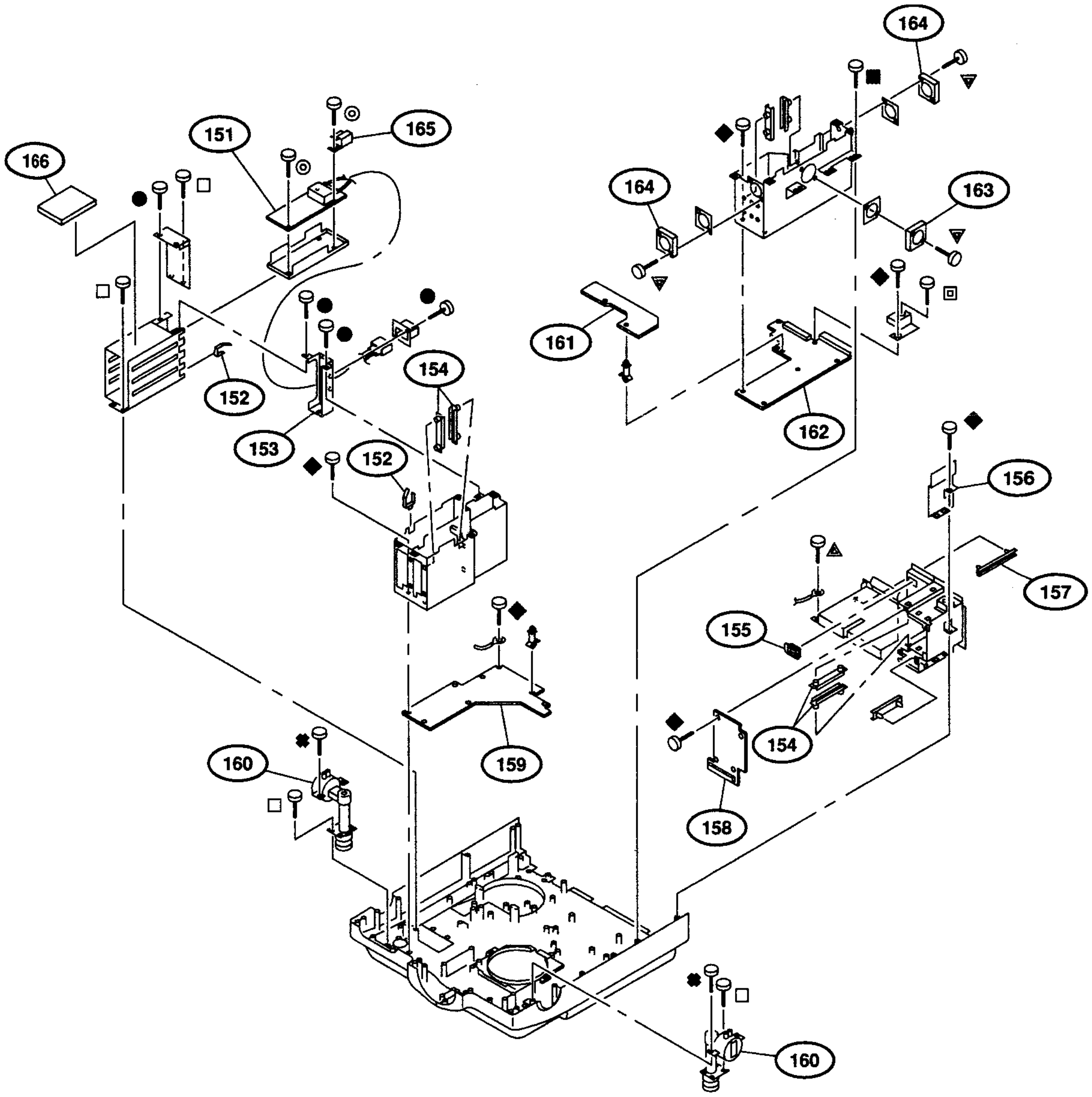
● : 7-682-148-01 +P3x8
▲ : 7-685-647-79 +BVTP3x10
■ : 7-685-660-11 +BVTP4x10
◆ : 7-682-904-21 +PWH4x10
▽ : 7-682-247-09 +K3x6
◇ : 7-685-167-19 WASHER HEAD SCREW +P4x35



REF NO.	PART NO.	DESCRIPTION	REMARK
101	1-763-257-11	FAN, DC	
102	* A-1316-401-A	GAA COMPL	
103	* A-1316-402-A	GAB COMPL	
104	* A-1316-403-A	GB COMPL	
105	* X-4036-250-5	COVER ASSY, G	
106	4-067-823-01	SCREW (+PWH M4X12)	
107	1-763-260-11	FAN, DC	
108	4-068-057-01	SCREW (4X45), PWH TAPPING	
109	* 1-533-703-11	HOLDER, FUSE (FE100U)	
	1-533-702-11	HOLDER, FUSE (FE100E/FE100M)	
110 ⚠	1-533-694-11	FUSE (5A/250V) (FE100U)	
⚠	1-576-233-11	FUSE (H. B. C) (6.3A/250V) (FE100E/FE100M)	
111	* 1-670-882-11	PWB, GF	
112 ⚠	1-785-591-11	INLET, AC	
113	* A-1390-906-A	XC MOUNT	
114	1-763-238-11	FAN, DC	
115	* A-1135-954-A	BC COMPL	
116	* A-1136-032-A	BA COMPL	
117	* A-1136-033-A	BB COMPL	
118	* X-4036-249-2	COVER ASSY, B	
119	* 4-068-102-01	GUARD (B), LIGHTING	
120	* 1-675-366-11	PWB, V	
121	1-500-037-11	CORE, FERRITE (WITH CASE)	
122	1-500-051-11	BEAD, FERRITE (WITH CASE)	
123	1-543-947-11	CORE, FERRITE	
124	* 4-069-523-01	SHEET (B), DUCT	

7-4. Chassis Block 3

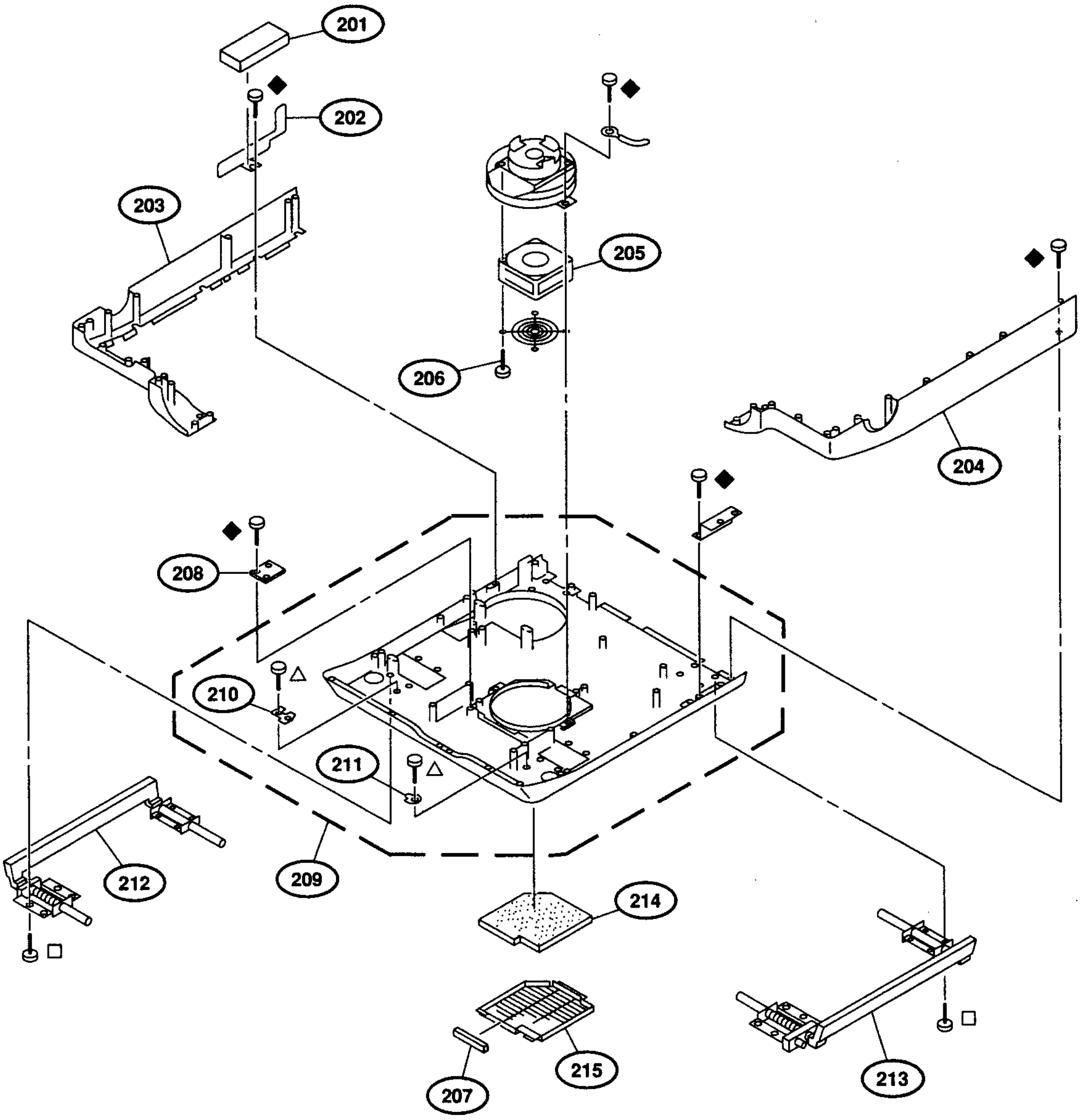
● : 7-682-148-01 +P3x8
■ : 7-685-660-11 +BVTP4x10
◆ : 7-682-904-21 +PWH4x10
✱ : 7-685-663-71 +BVTP4x16
□ : 7-682-662-09 +PS4x10
▽ : 7-682-653-09 +PS3x20
◎ : 7-685-645-79 +BVTP3x6
▲ : 7-682-962-01 +PSW4x10
⊡ : 7-685-158-19 +P4x6



REF NO.	PART NO.	DESCRIPTION	REMARK	REF NO.	PART NO.	DESCRIPTION	REMARK
151 ⚠	1-468-439-11	POWER BLOCK		160	4-068-172-02	ADJUSTOR	
152	* 4-316-015-00	HOLDER, WIRE					
153	* 4-068-176-02	PLATE, PLUG		161	* A-1390-880-A	XB MOUNT	
154	* 4-360-309-11	SUPPORT, PC BOARD		162	* A-1131-349-A	BM MOUNT	
155	* 4-056-414-01	BUSHING, SQUARE		163	1-763-259-11	FAN, DC	
				164	1-763-256-11	FAN, DC	
156	* 4-068-104-02	GUARD (D), LIGHTING		165	4-068-646-01	SHEET (BRA)	
157	4-055-970-01	RAIL (S), PC BOARD GUIDE					
158	* A-1390-879-A	XA MOUNT		166	* 4-069-522-02	SHEET (A), DUCT	
159	* A-1311-694-A	GM MOUNT					

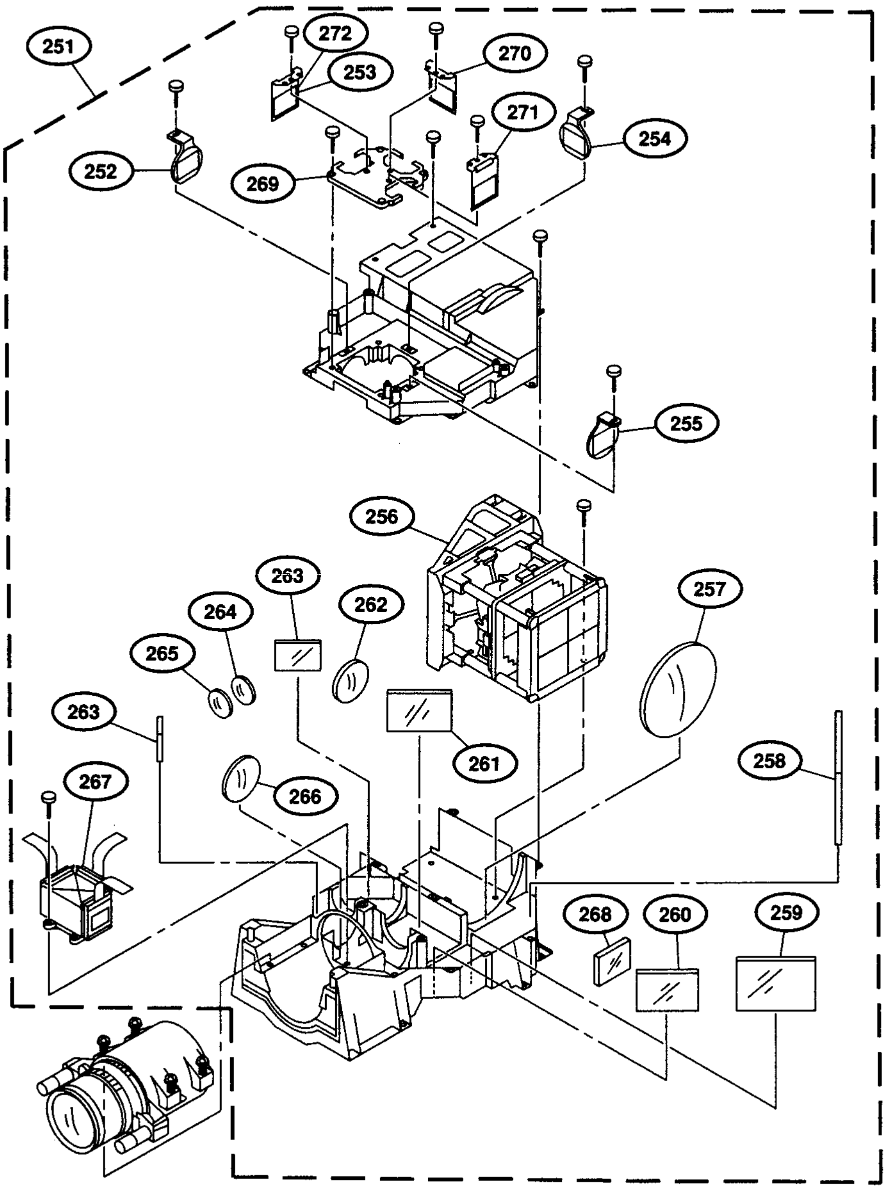
7-5. Base Block

■ : 7-685-660-11 +BVTP4x10
◆ : 7-682-904-21 +PWH4x10
△ : 7-682-903-21 +PWH3x8
□ : 7-682-662-09 +PS4x10



REF NO.	PART NO.	DESCRIPTION	REMARK
201	4-068-062-01	SHEET (B), CUSHION	
202	* 4-068-101-02	GUARD (A), LIGHTING	
203	* 4-068-148-03	PANEL (L), SIDE	
204	* 4-068-147-04	PANEL (R), SIDE	
205	1-763-274-11	FAN, DC	
206	4-068-057-01	SCREW (4X45), PWH TAPPING	
207	* 4-068-822-01	SHEET, FILTER	
208	* 1-675-363-11	PWB, UB	
209	* X-4036-258-2	BASE ASSY	210, 211
210	* 4-068-329-01	COVER (A), HOLE	
211	* 4-068-330-01	COVER (B), HOLE	
212	* 4-068-150-02	HANDLE (R)	
213	* 4-068-149-02	HANDLE (L)	
214	4-071-408-01	FILTER (LCD), FAN	
215	4-068-144-02	COVER, FILTER	

7-6. Optical Block



REF NO.	PART NO.	DESCRIPTION	REMARK
251	1-758-372-11	OPTICAL UNIT	252-272
252	9-884-265-01	POLARIZER, R	
253	9-882-839-01	POLARIZER, R-STANDARD-OUT	
254	9-884-262-01	POLARIZER, G/CONDENSER LENS	
255	9-884-263-01	POLARIZER, B/CONDENSER LENS	
256	* 9-884-260-01	FLYEYE/PS CONVERTER BLOCK	
257	* 9-881-922-01	MAIN CONDENSER LENS	
258	* 9-881-931-01	MIRROR A	
259	* 9-881-934-01	GR REFLECTION DICHROIC MIRROR	
260	* 9-881-932-01	MIRROR B	
261	9-881-935-01	G REFLECTION DICHROIC MIRROR	
262	* 9-881-926-01	LENS A, RELAY	
263	* 9-881-933-01	MIRROR C	
264	* 9-884-264-01	LENS B, RELAY	
265	* 9-881-928-01	LENS C, RELAY	
266	* 9-881-929-01	RED CONDENSER LENS	
267	1-758-373-11	PRISM BLOCK	
268	* 9-884-266-01	UV PROOF GLASS	
269	* 9-882-843-01	PRISM BLOCK LID	
270	9-882-841-01	POLARIZER, G-OUT	
271	9-882-842-01	POLARIZER, B-OUT	
272	9-882-840-01	POLARIZER, R-TELEZOOM-OUT	

Section 8
Electrical Parts List

NOTE :

The components identified marked ⚠ are critical for safety.
Replace only with the part number specified.

Les composants identifiés par la marque ⚠ sont critiques pour la sécurité.
Ne les remplacer que par une pièce portant le numéro spécifié.

- Items marked " * " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.

RESISTORS
- All resistors are in ohms.
- F: nonflammable
- METAL: Metal-film resistor
- METAL OXIDE: Metal oxide-film resistor

Ref.No.	Part No.	Description	Remark
	* A-1136-032-A	BA COMPL **********************	
	3-179-084-01	LEVER (R), PC BOARD	
	3-179-085-01	LEVER (L), PC BOARD	
	* 4-904-679-01	HEAT SINK (IC)	
	<CAPACITOR>		
C1001	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C1002	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C1003	1-128-004-11	ELECT CHIP 10MF 20% 16V	
C1004	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C1005	1-128-004-11	ELECT CHIP 10MF 20% 16V	
C1006	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C1007	1-128-004-11	ELECT CHIP 10MF 20% 16V	
C1008	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C1009	1-128-004-11	ELECT CHIP 10MF 20% 16V	
C1010	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C1011	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C1012	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C1013	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C1014	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C1015	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C1016	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C1017	1-128-004-11	ELECT CHIP 10MF 20% 16V	
C1018	1-128-004-11	ELECT CHIP 10MF 20% 16V	
C1019	1-128-004-11	ELECT CHIP 10MF 20% 16V	
C1020	1-128-004-11	ELECT CHIP 10MF 20% 16V	
C1021	1-128-004-11	ELECT CHIP 10MF 20% 16V	
C1022	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C1023	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C1024	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C1025	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C1026	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C1027	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C1028	1-128-007-11	ELECT CHIP 2.2MF 20% 35V	
C1029	1-128-007-11	ELECT CHIP 2.2MF 20% 35V	
C1030	1-128-007-11	ELECT CHIP 2.2MF 20% 35V	
C1031	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C1032	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C1033	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C1034	1-164-161-11	CERAMIC CHIP 0.0022MF 10% 50V	
C1035	1-164-161-11	CERAMIC CHIP 0.0022MF 10% 50V	
C1036	1-164-161-11	CERAMIC CHIP 0.0022MF 10% 50V	
C1037	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C1038	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C1039	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C1040	1-128-007-11	ELECT CHIP 2.2MF 20% 35V	
C1041	1-128-007-11	ELECT CHIP 2.2MF 20% 35V	
C1042	1-128-007-11	ELECT CHIP 2.2MF 20% 35V	
C1043	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C1044	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C1045	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C1046	1-163-239-11	CERAMIC CHIP 33PF 5% 50V	
C1047	1-163-239-11	CERAMIC CHIP 33PF 5% 50V	
C1048	1-163-239-11	CERAMIC CHIP 33PF 5% 50V	
C1049	1-126-204-11	ELECT CHIP 47MF 20% 16V	
C1050	1-117-681-11	ELECT CHIP 100MF 20% 16V	
C1051	1-128-004-11	ELECT CHIP 10MF 20% 16V	
C1052	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C1053	1-128-004-11	ELECT CHIP 10MF 20% 16V	
C1054	1-128-004-11	ELECT CHIP 10MF 20% 16V	
C1055	1-117-681-11	ELECT CHIP 100MF 20% 16V	
C1057	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C1058	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C1059	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C1060	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C1061	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C1064	1-117-681-11	ELECT CHIP 100MF 20% 16V	
C1065	1-104-655-11	ELECT 470MF 20% 6.3V	
C1066	1-104-655-11	ELECT 470MF 20% 6.3V	
C1067	1-128-004-11	ELECT CHIP 10MF 20% 16V	
C1068	1-128-004-11	ELECT CHIP 10MF 20% 16V	
C1069	1-126-204-11	ELECT CHIP 47MF 20% 16V	
C1070	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C1072	1-163-222-11	CERAMIC CHIP 5PF 0.25PF 50V	
C1073	1-163-222-11	CERAMIC CHIP 5PF 0.25PF 50V	
C1074	1-163-222-11	CERAMIC CHIP 5PF 0.25PF 50V	
C1075	1-128-004-11	ELECT CHIP 10MF 20% 16V	
C1076	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C1080	1-163-222-11	CERAMIC CHIP 5PF 0.25PF 50V	
C1081	1-163-222-11	CERAMIC CHIP 5PF 0.25PF 50V	
C1082	1-163-222-11	CERAMIC CHIP 5PF 0.25PF 50V	
C1086	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C1087	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C1088	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C1089	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C1090	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	

BA

Ref.No.	Part No.	Description	Remark
C1091	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C1092	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C1093	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C1094	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C1095	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C1096	1-164-161-11	CERAMIC CHIP 0.0022MF 10% 50V	
C1097	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C1098	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C1099	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C1100	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C1101	1-126-395-11	ELECT CHIP 22MF 20% 16V	
C1102	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C1106	1-128-004-11	ELECT CHIP 10MF 20% 16V	
C1109	1-126-395-11	ELECT CHIP 22MF 20% 16V	
C1110	1-126-204-11	ELECT CHIP 47MF 20% 16V	
C1111	1-126-204-11	ELECT CHIP 47MF 20% 16V	
C1112	1-128-013-11	ELECT CHIP 1MF 20% 50V	
C1113	1-128-013-11	ELECT CHIP 1MF 20% 50V	
C1114	1-128-004-11	ELECT CHIP 10MF 20% 16V	
C1115	1-163-021-91	CERAMIC CHIP 0.01MF 10% 50V	
C1116	1-126-204-11	ELECT CHIP 47MF 20% 16V	
C1117	1-128-013-11	ELECT CHIP 1MF 20% 50V	
C1118	1-126-204-11	ELECT CHIP 47MF 20% 16V	
C1119	1-163-021-91	CERAMIC CHIP 0.01MF 10% 50V	
C1120	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C1121	1-163-021-91	CERAMIC CHIP 0.01MF 10% 50V	
C1122	1-163-021-91	CERAMIC CHIP 0.01MF 10% 50V	
C1123	1-104-655-11	ELECT 470MF 20% 6.3V	
C1124	1-163-021-91	CERAMIC CHIP 0.01MF 10% 50V	
C1125	1-163-089-00	CERAMIC CHIP 6PF 0.5PF 50V	
C1126	1-163-009-11	CERAMIC CHIP 0.001MF 10% 50V	
C1128	1-128-006-11	ELECT CHIP 4.7MF 20% 25V	
C1129	1-163-021-91	CERAMIC CHIP 0.01MF 10% 50V	
C1130	1-163-021-91	CERAMIC CHIP 0.01MF 10% 50V	
C1131	1-104-658-11	ELECT 100MF 20% 10V	
C1132	1-163-021-91	CERAMIC CHIP 0.01MF 10% 50V	
C1133	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C1134	1-163-021-91	CERAMIC CHIP 0.01MF 10% 50V	
C1135	1-163-021-91	CERAMIC CHIP 0.01MF 10% 50V	
C1136	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C1137	1-117-681-11	ELECT CHIP 100MF 20% 16V	
C1138	1-163-227-11	CERAMIC CHIP 10PF 0.5PF 50V	
C1139	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C1140	1-163-021-91	CERAMIC CHIP 0.01MF 10% 50V	
C1141	1-128-004-11	ELECT CHIP 10MF 20% 16V	
C1142	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C1143	1-117-681-11	ELECT CHIP 100MF 20% 16V	
C1144	1-128-396-11	ELECT CHIP 470MF 20% 10V	
C1145	1-163-021-91	CERAMIC CHIP 0.01MF 10% 50V	
C1146	1-104-655-11	ELECT 470MF 20% 6.3V	
C1147	1-128-004-11	ELECT CHIP 10MF 20% 16V	
C1148	1-128-004-11	ELECT CHIP 10MF 20% 16V	
C1149	1-163-021-91	CERAMIC CHIP 0.01MF 10% 50V	
C1150	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C1151	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C1152	1-163-227-11	CERAMIC CHIP 10PF 0.5PF 50V	
C1153	1-163-021-91	CERAMIC CHIP 0.01MF 10% 50V	
C1154	1-163-021-91	CERAMIC CHIP 0.01MF 10% 50V	
C1155	1-163-021-91	CERAMIC CHIP 0.01MF 10% 50V	
C1156	1-128-004-11	ELECT CHIP 10MF 20% 16V	
C1157	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C1158	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C1159	1-126-205-11	ELECT CHIP 47MF 20% 6.3V	
C1160	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C1161	1-164-161-11	CERAMIC CHIP 0.0022MF 10% 50V	
C1162	1-126-204-11	ELECT CHIP 47MF 20% 16V	
C1163	1-128-013-11	ELECT CHIP 1MF 20% 50V	
C1164	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C1165	1-164-161-11	CERAMIC CHIP 0.0022MF 10% 50V	
C1166	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C1167	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C1168	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C1169	1-164-161-11	CERAMIC CHIP 0.0022MF 10% 50V	
C1170	1-163-021-91	CERAMIC CHIP 0.01MF 10% 50V	
C1171	1-163-021-91	CERAMIC CHIP 0.01MF 10% 50V	
C1172	1-163-021-91	CERAMIC CHIP 0.01MF 10% 50V	
C1173	1-163-021-91	CERAMIC CHIP 0.01MF 10% 50V	
C1174	1-163-021-91	CERAMIC CHIP 0.01MF 10% 50V	
C1175	1-163-021-91	CERAMIC CHIP 0.01MF 10% 50V	
C1176	1-163-021-91	CERAMIC CHIP 0.01MF 10% 50V	
C1177	1-128-004-11	ELECT CHIP 10MF 20% 16V	
C1178	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C1179	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C1180	1-163-243-11	CERAMIC CHIP 47PF 5% 50V	
C1181	1-163-243-11	CERAMIC CHIP 47PF 5% 50V	
C1182	1-163-243-11	CERAMIC CHIP 47PF 5% 50V	
C1201	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C1202	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C1203	1-164-161-11	CERAMIC CHIP 0.0022MF 10% 50V	
C1204	1-164-161-11	CERAMIC CHIP 0.0022MF 10% 50V	
C1205	1-164-161-11	CERAMIC CHIP 0.0022MF 10% 50V	
C1206	1-164-161-11	CERAMIC CHIP 0.0022MF 10% 50V	
C1207	1-164-161-11	CERAMIC CHIP 0.0022MF 10% 50V	
C1208	1-164-161-11	CERAMIC CHIP 0.0022MF 10% 50V	
C1209	1-164-161-11	CERAMIC CHIP 0.0022MF 10% 50V	
C1210	1-164-161-11	CERAMIC CHIP 0.0022MF 10% 50V	
C1211	1-164-161-11	CERAMIC CHIP 0.0022MF 10% 50V	
C1212	1-164-161-11	CERAMIC CHIP 0.0022MF 10% 50V	
C1213	1-164-161-11	CERAMIC CHIP 0.0022MF 10% 50V	
C1214	1-164-161-11	CERAMIC CHIP 0.0022MF 10% 50V	
C1215	1-164-161-11	CERAMIC CHIP 0.0022MF 10% 50V	
C1216	1-164-161-11	CERAMIC CHIP 0.0022MF 10% 50V	
C1217	1-128-004-11	ELECT CHIP 10MF 20% 16V	
C1218	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C1219	1-117-681-11	ELECT CHIP 100MF 20% 16V	
C1251	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C1252	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C1253	1-163-131-00	CERAMIC CHIP 390PF 5% 50V	
C1254	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C1255	1-163-229-11	CERAMIC CHIP 12PF 5% 50V	
C1256	1-163-229-11	CERAMIC CHIP 12PF 5% 50V	
C1257	1-128-004-11	ELECT CHIP 10MF 20% 16V	
C1258	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C1259	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C1260	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C1261	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C1262	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C1263	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C1265	1-128-013-11	ELECT CHIP 1MF 20% 50V	
C1266	1-128-004-11	ELECT CHIP 10MF 20% 16V	
C1267	1-128-004-11	ELECT CHIP 10MF 20% 16V	
C1268	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C1269	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C1270	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C1271	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C1272	1-128-007-11	ELECT CHIP 2.2MF 20% 35V	
C1273	1-163-251-11	CERAMIC CHIP 100PF 5% 50V	
C1274	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C1275	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C1276	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C1278	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C1279	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	

Ref.No.	Part No.	Description	Remark
C1280	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C1281	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C1282	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C1283	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C1284	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C1287	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C1289	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C1290	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C1291	1-128-396-11	ELECT CHIP 470MF 20% 10V	
C1292	1-107-823-11	CERAMIC CHIP 0.47MF 10% 16V	
C1293	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C1294	1-126-204-11	ELECT CHIP 47MF 20% 16V	
C1297	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C1298	1-128-004-11	ELECT CHIP 10MF 20% 16V	
C1300	1-163-133-00	CERAMIC CHIP 470PF 5% 50V	
C1303	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C1304	1-128-013-11	ELECT CHIP 1MF 20% 50V	
C1305	1-128-004-11	ELECT CHIP 10MF 20% 16V	
C1308	1-163-231-11	CERAMIC CHIP 15PF 5% 50V	
C1309	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C1310	1-128-004-11	ELECT CHIP 10MF 20% 16V	
C1311	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C1312	1-164-161-11	CERAMIC CHIP 0.0022MF 10% 50V	
C1313	1-164-161-11	CERAMIC CHIP 0.0022MF 10% 50V	
C1314	1-164-161-11	CERAMIC CHIP 0.0022MF 10% 50V	
C1315	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C1316	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C1317	1-164-161-11	CERAMIC CHIP 0.0022MF 10% 50V	
C1318	1-163-229-11	CERAMIC CHIP 12PF 5% 50V	
C1319	1-163-229-11	CERAMIC CHIP 12PF 5% 50V	
C1320	1-126-204-11	ELECT CHIP 47MF 20% 16V	
C1321	1-126-204-11	ELECT CHIP 47MF 20% 16V	
C1322	1-104-655-11	ELECT 470MF 20% 6.3V	
C1323	1-163-021-91	CERAMIC CHIP 0.01MF 10% 50V	
C1324	1-163-227-11	CERAMIC CHIP 10PF 0.5PF 50V	
C1325	1-163-021-91	CERAMIC CHIP 0.01MF 10% 50V	
C1326	1-163-021-91	CERAMIC CHIP 0.01MF 10% 50V	
C1327	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C1328	1-104-655-11	ELECT 470MF 20% 6.3V	
C1401	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C1402	1-126-204-11	ELECT CHIP 47MF 20% 16V	
C1403	1-109-982-11	CERAMIC CHIP 1MF 10% 10V	
C1404	1-109-982-11	CERAMIC CHIP 1MF 10% 10V	
C1405	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C1406	1-126-204-11	ELECT CHIP 47MF 20% 16V	
C1407	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C1408	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C1409	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C1410	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C1411	1-163-229-11	CERAMIC CHIP 12PF 5% 50V	
C1412	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C1413	1-163-229-11	CERAMIC CHIP 12PF 5% 50V	
C1414	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C1415	1-163-222-11	CERAMIC CHIP 5PF 0.25PF 50V	
C1416	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C1417	1-163-017-00	CERAMIC CHIP 0.0047MF 10% 50V	
C1418	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C1419	1-128-006-11	ELECT CHIP 4.7MF 20% 25V	
C1420	1-128-006-11	ELECT CHIP 4.7MF 20% 25V	
C1421	1-128-006-11	ELECT CHIP 4.7MF 20% 25V	
C1422	1-128-006-11	ELECT CHIP 4.7MF 20% 25V	
C1423	1-163-809-11	CERAMIC CHIP 0.047MF 10% 25V	
C1424	1-109-982-11	CERAMIC CHIP 1MF 10% 10V	
C1425	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C1426	1-128-396-11	ELECT CHIP 470MF 20% 10V	
C1427	1-164-344-11	CERAMIC CHIP 0.068MF 10% 25V	
C1428	1-164-344-11	CERAMIC CHIP 0.068MF 10% 25V	
C1429	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C1430	1-163-133-00	CERAMIC CHIP 470PF 5% 50V	
C1431	1-107-823-11	CERAMIC CHIP 0.47MF 10% 16V	
C1432	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C1433	1-126-204-11	ELECT CHIP 47MF 20% 16V	
C1434	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C1435	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C1436	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C1437	1-128-004-11	ELECT CHIP 10MF 20% 16V	
C1438	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C1439	1-163-235-11	CERAMIC CHIP 22PF 5% 50V	
C1441	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C1442	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C1443	1-126-204-11	ELECT CHIP 47MF 20% 16V	
C1444	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C1445	1-126-204-11	ELECT CHIP 47MF 20% 16V	
C1446	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C1447	1-126-204-11	ELECT CHIP 47MF 20% 16V	
C1448	1-126-204-11	ELECT CHIP 47MF 20% 16V	
C1449	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C1450	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C1451	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C1452	1-163-021-91	CERAMIC CHIP 0.01MF 10% 50V	
C1453	1-163-021-91	CERAMIC CHIP 0.01MF 10% 50V	
C1454	1-163-009-11	CERAMIC CHIP 0.001MF 10% 50V	
C1455	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C1456	1-126-204-11	ELECT CHIP 47MF 20% 16V	
C1457	1-126-204-11	ELECT CHIP 47MF 20% 16V	
C1458	1-126-204-11	ELECT CHIP 47MF 20% 16V	
C1459	1-128-004-11	ELECT CHIP 10MF 20% 16V	
C1460	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C1461	1-107-823-11	CERAMIC CHIP 0.47MF 10% 16V	
C1462	1-107-823-11	CERAMIC CHIP 0.47MF 10% 16V	
C1463	1-107-823-11	CERAMIC CHIP 0.47MF 10% 16V	
C1464	1-107-823-11	CERAMIC CHIP 0.47MF 10% 16V	
C1465	1-107-823-11	CERAMIC CHIP 0.47MF 10% 16V	
C1466	1-107-823-11	CERAMIC CHIP 0.47MF 10% 16V	
C1467	1-107-823-11	CERAMIC CHIP 0.47MF 10% 16V	
C1468	1-107-823-11	CERAMIC CHIP 0.47MF 10% 16V	
C1469	1-107-823-11	CERAMIC CHIP 0.47MF 10% 16V	
C1470	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C1471	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C1472	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C1473	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C1474	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C1475	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C1476	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C1477	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C1478	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C1479	1-126-204-11	ELECT CHIP 47MF 20% 16V	
C1480	1-126-204-11	ELECT CHIP 47MF 20% 16V	
C1484	1-126-204-11	ELECT CHIP 47MF 20% 16V	
C1485	1-126-204-11	ELECT CHIP 47MF 20% 16V	
C1486	1-163-089-00	CERAMIC CHIP 6PF 0.5PF 50V	
C1487	1-163-251-11	CERAMIC CHIP 100PF 5% 50V	
C1488	1-164-161-11	CERAMIC CHIP 0.0022MF 10% 50V	
C1489	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C1490	1-164-161-11	CERAMIC CHIP 0.0022MF 10% 50V	
C1491	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C1494	1-163-251-11	CERAMIC CHIP 100PF 5% 50V	
C1495	1-126-204-11	ELECT CHIP 47MF 20% 16V	
C1496	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C1497	1-128-004-11	ELECT CHIP 10MF 20% 16V	
C1498	1-126-204-11	ELECT CHIP 47MF 20% 16V	
C1499	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	

BA

Ref.No.	Part No.	Description			Remark
C1500	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C1501	1-164-161-11	CERAMIC CHIP	0.0022MF	10%	50V
C1502	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C1503	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C1751	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C1752	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C1753	1-128-013-11	ELECT CHIP	1MF	20%	50V
C1754	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C1755	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C1756	1-128-013-11	ELECT CHIP	1MF	20%	50V
C1757	1-128-013-11	ELECT CHIP	1MF	20%	50V
C1758	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C1759	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C1760	1-128-013-11	ELECT CHIP	1MF	20%	50V
C1761	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C1762	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C1763	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C1764	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C1765	1-128-013-11	ELECT CHIP	1MF	20%	50V
C1766	1-128-013-11	ELECT CHIP	1MF	20%	50V
C1767	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C1768	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C1769	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C1770	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C1771	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C1772	1-128-004-11	ELECT CHIP	10MF	20%	16V
C1773	1-128-004-11	ELECT CHIP	10MF	20%	16V
C1774	1-164-161-11	CERAMIC CHIP	0.0022MF	10%	50V
C1775	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C1776	1-163-222-11	CERAMIC CHIP	5PF	0.25PF	50V
C1777	1-163-222-11	CERAMIC CHIP	5PF	0.25PF	50V
C1778	1-163-222-11	CERAMIC CHIP	5PF	0.25PF	50V
C1779	1-164-161-11	CERAMIC CHIP	0.0022MF	10%	50V
C1780	1-164-161-11	CERAMIC CHIP	0.0022MF	10%	50V
C1781	1-164-161-11	CERAMIC CHIP	0.0022MF	10%	50V
C1782	1-128-396-11	ELECT CHIP	470MF	20%	10V
C1783	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C1784	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C1785	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C1786	1-126-204-11	ELECT CHIP	47MF	20%	16V
C1787	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C1788	1-164-161-11	CERAMIC CHIP	0.0022MF	10%	50V
C1789	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C1901	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C1902	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C1903	1-128-004-11	ELECT CHIP	10MF	20%	16V
C1904	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C1905	1-117-681-11	ELECT CHIP	100MF	20%	16V
C1906	1-128-004-11	ELECT CHIP	10MF	20%	16V
C1907	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C1908	1-109-982-11	CERAMIC CHIP	1MF	10%	10V
C1909	1-163-239-11	CERAMIC CHIP	33PF	5%	50V
C1910	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C1911	1-128-004-11	ELECT CHIP	10MF	20%	16V
C1912	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C1913	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C1914	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C1915	1-117-681-11	ELECT CHIP	100MF	20%	16V
C1916	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C1917	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C1918	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C1919	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C1920	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C1922	1-163-143-00	CERAMIC CHIP	0.0012MF	5%	50V
C1923	1-110-501-11	CERAMIC CHIP	0.33MF	10%	16V
C1924	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C1925	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C1926	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C1927	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C1928	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C1929	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C1930	1-128-004-11	ELECT CHIP	10MF	20%	16V
C1931	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C1932	1-128-004-11	ELECT CHIP	10MF	20%	16V
C1933	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C1934	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C1935	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C1936	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C1937	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C1938	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C1939	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C1940	1-126-205-11	ELECT CHIP	47MF	20%	6.3V
C1941	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C1944	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C1945	1-164-161-11	CERAMIC CHIP	0.0022MF	10%	50V
C1946	1-164-161-11	CERAMIC CHIP	0.0022MF	10%	50V
C1947	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C1950	1-164-161-11	CERAMIC CHIP	0.0022MF	10%	50V
C1951	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C1952	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C1953	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C1954	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C1955	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C1956	1-163-231-11	CERAMIC CHIP	15PF	5%	50V
C1957	1-163-231-11	CERAMIC CHIP	15PF	5%	50V
C1958	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C1959	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C1960	1-163-009-11	CERAMIC CHIP	0.001MF	10%	50V
C1961	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C1962	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C1963	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C1964	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C1965	1-126-205-11	ELECT CHIP	47MF	20%	6.3V
C1968	1-163-009-11	CERAMIC CHIP	0.001MF	10%	50V
C1969	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C1970	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C9001	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C9002	1-128-004-11	ELECT CHIP	10MF	20%	16V
C9003	1-126-205-11	ELECT CHIP	47MF	20%	6.3V
C9004	1-128-006-11	ELECT CHIP	4.7MF	20%	25V
C9005	1-163-021-91	CERAMIC CHIP	0.01MF	10%	50V
C9006	1-126-205-11	ELECT CHIP	47MF	20%	6.3V
C9007	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C9008	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C9009	1-163-021-91	CERAMIC CHIP	0.01MF	10%	50V
C9010	1-126-205-11	ELECT CHIP	47MF	20%	6.3V
C9011	1-126-205-11	ELECT CHIP	47MF	20%	6.3V
C9012	1-126-205-11	ELECT CHIP	47MF	20%	6.3V
C9013	1-126-205-11	ELECT CHIP	47MF	20%	6.3V
C9014	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C9015	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C9016	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C9017	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C9018	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C9019	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C9020	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C9021	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C9022	1-126-205-11	ELECT CHIP	47MF	20%	6.3V
C9023	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C9024	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C9025	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C9026	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V

Ref.No.	Part No.	Description	Remark
C9027	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C9028	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C9029	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C9030	1-126-205-11	ELECT CHIP 47MF 20% 6.3V	
C9032	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C9033	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C9034	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C9035	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C9036	1-107-823-11	CERAMIC CHIP 0.47MF 10% 16V	
C9037	1-126-205-11	ELECT CHIP 47MF 20% 6.3V	
C9038	1-126-205-11	ELECT CHIP 47MF 20% 6.3V	
C9039	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C9040	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C9041	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C9042	1-164-161-11	CERAMIC CHIP 0.0022MF 10% 50V	
C9043	1-126-205-11	ELECT CHIP 47MF 20% 6.3V	
C9044	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C9045	1-126-205-11	ELECT CHIP 47MF 20% 6.3V	
C9046	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C9047	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C9048	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C9049	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C9050	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C9051	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C9052	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C9053	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C9054	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C9055	1-126-205-11	ELECT CHIP 47MF 20% 6.3V	
C9056	1-163-009-11	CERAMIC CHIP 0.001MF 10% 50V	
C9057	1-163-133-00	CERAMIC CHIP 470PF 5% 50V	
C9058	1-164-161-11	CERAMIC CHIP 0.0022MF 10% 50V	
C9059	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C9062	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C9063	1-164-161-11	CERAMIC CHIP 0.0022MF 10% 50V	
C9064	1-126-205-11	ELECT CHIP 47MF 20% 6.3V	
C9101	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C9102	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C9103	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C9104	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C9105	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C9106	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C9107	1-126-205-11	ELECT CHIP 47MF 20% 6.3V	
C9108	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C9109	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C9110	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C9111	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C9112	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C9113	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C9114	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C9115	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C9116	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C9117	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C9118	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C9119	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C9120	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C9121	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C9122	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C9123	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C9124	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C9125	1-126-205-11	ELECT CHIP 47MF 20% 6.3V	
C9126	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C9127	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C9128	1-126-205-11	ELECT CHIP 47MF 20% 6.3V	
C9129	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C9130	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C9131	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C9132	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C9133	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C9134	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C9135	1-164-161-11	CERAMIC CHIP 0.0022MF 10% 50V	
C9136	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C9137	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C9138	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C9139	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C9140	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C9141	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C9142	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C9143	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C9144	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C9145	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C9146	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C9147	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C9148	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C9149	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C9150	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C9151	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C9152	1-117-681-11	ELECT CHIP 100MF 20% 16V	
C9153	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C9154	1-126-205-11	ELECT CHIP 47MF 20% 6.3V	
C9155	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C9156	1-128-004-11	ELECT CHIP 10MF 20% 16V	
C9157	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C9158	1-164-161-11	CERAMIC CHIP 0.0022MF 10% 50V	
C9159	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C9201	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C9202	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C9203	1-126-205-11	ELECT CHIP 47MF 20% 6.3V	
C9204	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C9205	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C9206	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C9207	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C9208	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C9209	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C9210	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C9211	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C9212	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C9213	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C9214	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C9215	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C9216	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C9217	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C9218	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C9219	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C9220	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C9221	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C9222	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C9223	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C9224	1-126-205-11	ELECT CHIP 47MF 20% 6.3V	
C9225	1-164-161-11	CERAMIC CHIP 0.0022MF 10% 50V	
C9226	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C9227	1-126-205-11	ELECT CHIP 47MF 20% 6.3V	
C9228	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C9229	1-163-235-11	CERAMIC CHIP 22PF 5% 50V	
C9230	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C9231	1-126-205-11	ELECT CHIP 47MF 20% 6.3V	
C9232	1-126-205-11	ELECT CHIP 47MF 20% 6.3V	
C9233	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C9234	1-128-004-11	ELECT CHIP 10MF 20% 16V	
C9235	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C9236	1-164-161-11	CERAMIC CHIP 0.0022MF 10% 50V	
C9237	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C9240	1-163-021-91	CERAMIC CHIP 0.01MF 10% 50V	

Ref.No.	Part No.	Description			Remark
C9244	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C9248	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C9252	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C9501	1-126-204-11	ELECT CHIP	47MF	20%	16V
C9502	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C9503	1-128-004-11	ELECT CHIP	10MF	20%	16V
C9504	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C9505	1-126-204-11	ELECT CHIP	47MF	20%	16V
C9506	1-107-823-11	CERAMIC CHIP	0.47MF	10%	16V
C9507	1-107-823-11	CERAMIC CHIP	0.47MF	10%	16V
C9508	1-107-823-11	CERAMIC CHIP	0.47MF	10%	16V
C9509	1-107-823-11	CERAMIC CHIP	0.47MF	10%	16V
C9510	1-107-823-11	CERAMIC CHIP	0.47MF	10%	16V
C9511	1-107-823-11	CERAMIC CHIP	0.47MF	10%	16V
C9512	1-107-823-11	CERAMIC CHIP	0.47MF	10%	16V
C9513	1-107-823-11	CERAMIC CHIP	0.47MF	10%	16V
C9514	1-107-823-11	CERAMIC CHIP	0.47MF	10%	16V
C9515	1-107-823-11	CERAMIC CHIP	0.47MF	10%	16V
C9516	1-107-823-11	CERAMIC CHIP	0.47MF	10%	16V
C9517	1-128-004-11	ELECT CHIP	10MF	20%	16V
C9518	1-128-004-11	ELECT CHIP	10MF	20%	16V
C9519	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C9520	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C9521	1-128-004-11	ELECT CHIP	10MF	20%	16V
C9522	1-107-823-11	CERAMIC CHIP	0.47MF	10%	16V
C9523	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C9524	1-107-823-11	CERAMIC CHIP	0.47MF	10%	16V
C9525	1-107-823-11	CERAMIC CHIP	0.47MF	10%	16V
C9526	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C9527	1-126-204-11	ELECT CHIP	47MF	20%	16V
C9528	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C9529	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C9530	1-128-004-11	ELECT CHIP	10MF	20%	16V
C9531	1-163-021-91	CERAMIC CHIP	0.01MF	10%	50V
C9532	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C9533	1-126-204-11	ELECT CHIP	47MF	20%	16V
C9534	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C9535	1-109-982-11	CERAMIC CHIP	1MF	10%	10V
C9536	1-126-204-11	ELECT CHIP	47MF	20%	16V
C9537	1-126-204-11	ELECT CHIP	47MF	20%	16V
C9538	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C9539	1-107-823-11	CERAMIC CHIP	0.47MF	10%	16V
C9540	1-107-823-11	CERAMIC CHIP	0.47MF	10%	16V
C9541	1-107-823-11	CERAMIC CHIP	0.47MF	10%	16V
C9542	1-107-823-11	CERAMIC CHIP	0.47MF	10%	16V
C9543	1-107-823-11	CERAMIC CHIP	0.47MF	10%	16V
C9544	1-107-823-11	CERAMIC CHIP	0.47MF	10%	16V
C9545	1-128-013-11	ELECT CHIP	1MF	20%	50V
C9546	1-107-823-11	CERAMIC CHIP	0.47MF	10%	16V
C9547	1-107-823-11	CERAMIC CHIP	0.47MF	10%	16V
C9548	1-107-823-11	CERAMIC CHIP	0.47MF	10%	16V
C9549	1-107-823-11	CERAMIC CHIP	0.47MF	10%	16V
C9550	1-163-021-91	CERAMIC CHIP	0.01MF	10%	50V
C9551	1-107-823-11	CERAMIC CHIP	0.47MF	10%	16V
C9552	1-126-204-11	ELECT CHIP	47MF	20%	16V
C9553	1-107-823-11	CERAMIC CHIP	0.47MF	10%	16V
C9554	1-107-823-11	CERAMIC CHIP	0.47MF	10%	16V
C9555	1-107-823-11	CERAMIC CHIP	0.47MF	10%	16V
C9556	1-107-823-11	CERAMIC CHIP	0.47MF	10%	16V
C9557	1-107-823-11	CERAMIC CHIP	0.47MF	10%	16V
C9558	1-107-823-11	CERAMIC CHIP	0.47MF	10%	16V
C9559	1-164-161-11	CERAMIC CHIP	0.0022MF	10%	50V
C9560	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C9561	1-107-823-11	CERAMIC CHIP	0.47MF	10%	16V
C9562	1-107-823-11	CERAMIC CHIP	0.47MF	10%	16V
C9563	1-107-823-11	CERAMIC CHIP	0.47MF	10%	16V

Ref.No.	Part No.	Description			Remark
C9564	1-164-161-11	CERAMIC CHIP	0.0022MF	10%	50V
C9565	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C9566	1-164-161-11	CERAMIC CHIP	0.0022MF	10%	50V
C9567	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C9568	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C9569	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C9570	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
	<DIODE>				
D1001	8-719-800-76	DIODE 1SS226			
D1002	8-719-800-76	DIODE 1SS226			
D1003	8-719-800-76	DIODE 1SS226			
D1101	8-719-801-78	DIODE 1SS184			
D1401	8-719-914-43	DIODE DAN202K			
D1901	8-719-914-43	DIODE DAN202K			
D9001	8-719-422-12	DIODE MA8039			
	<FERRITE BEAD>				
FB1251	1-414-753-91	INDUCTOR		4.7µH	
FB1252	1-543-775-11	FERRITE		0µH	
FB1253	1-543-775-11	FERRITE		0µH	
FB1254	1-543-775-11	FERRITE		0µH	
FB1256	1-414-753-91	INDUCTOR		4.7µH	
FB1257	1-414-234-22	INDUCTOR CHIP		0µH	
FB1258	1-414-234-22	INDUCTOR CHIP		0µH	
FB1259	1-414-234-22	INDUCTOR CHIP		0µH	
FB1260	1-414-234-22	INDUCTOR CHIP		0µH	
FB1261	1-414-234-22	INDUCTOR CHIP		0µH	
FB1262	1-414-234-22	INDUCTOR CHIP		0µH	
FB9202	1-414-234-22	INDUCTOR CHIP		0µH	
FB9203	1-414-234-22	INDUCTOR CHIP		0µH	
	<FILTER>				
FL1101	1-239-289-11	FILTER, LOW PASS			
FL1102	1-239-289-11	FILTER, LOW PASS			
FL1103	1-239-289-11	FILTER, LOW PASS			
FL1251	1-239-289-11	FILTER, LOW PASS			
FL1252	1-239-289-11	FILTER, LOW PASS			
FL1254	1-239-847-11	FILTER, LOW PASS			
FL1401	1-233-505-21	FILTER, LOW PASS			
FL1402	1-233-504-21	FILTER, LOW PASS			
FL1403	1-233-504-21	FILTER, LOW PASS			
FL9201	1-234-113-21	FILTER, LOW PASS			
FL9202	1-234-112-21	FILTER, LOW PASS			
FL9203	1-234-112-21	FILTER, LOW PASS			
	<IC>				
IC1001	8-752-061-02	IC CXA1450M			
IC1002	8-752-061-02	IC CXA1450M			
IC1003	8-752-061-02	IC CXA1450M			
IC1004	8-759-470-51	IC MB88141APFV-ER			
IC1005	8-759-431-38	IC MAX4121CSA-TE2			
IC1006	8-759-431-38	IC MAX4121CSA-TE2			
IC1007	8-759-431-38	IC MAX4121CSA-TE2			
IC1008	8-759-470-51	IC MB88141APFV-ER			
IC1009	8-759-543-16	IC EL4093CS-TE2			
IC1010	8-759-543-16	IC EL4093CS-TE2			
IC1011	8-759-543-16	IC EL4093CS-TE2			
IC1012	8-759-460-74	IC BA05FP-E2			
IC1013	8-759-460-74	IC BA05FP-E2			
IC1014	8-759-460-81	IC BA12FP-E2			
IC1016	8-759-460-79	IC BA09FP-E2			

Ref.No.	Part No.	Description	Remark
IC1017	8-759-388-31	IC PQ20VZ1U	
IC1101	8-752-068-45	IC CXA1855Q	
IC1102	8-759-710-29	IC NJM2235M	
IC1103	8-759-711-62	IC NJM2240M	
IC1104	8-752-372-78	IC CXD2024AQ	
IC1105	8-759-353-02	IC NJM2533M(TE2)	
IC1106	8-759-353-02	IC NJM2533M(TE2)	
IC1251	8-759-269-92	IC SN74HCU04ANSR	
IC1252	8-759-568-27	IC MSM514265C-60JSDR1	
IC1253	8-759-161-24	IC UPC659AGS-E2	
IC1254	8-759-536-12	IC UPD64081BGF-3BA	
IC1401	8-759-565-20	IC TDA4665T/V5-118	
IC1402	8-759-295-47	IC TDA9141-N2C	
IC1403	8-759-335-57	IC MM1112XF	
IC1404	8-759-335-57	IC MM1112XF	
IC1405	8-759-058-62	IC TC7S08FU(TE85R)	
IC1406	8-759-344-12	IC GS4981CTA	
IC1407	8-759-082-58	IC TC7W08FU	
IC1408	8-759-082-57	IC TC7W04FU	
IC1409	8-759-008-45	IC MC74HC4538F	
IC1410	8-752-082-49	IC CXA2119M	
IC1751	8-752-053-19	IC CXA1166K	
IC1752	8-752-053-19	IC CXA1166K	
IC1753	8-752-053-19	IC CXA1166K	
IC1754	8-759-331-71	IC NJM4558E(TE2)	
IC1755	8-759-530-57	IC TLV431ACDBV2	
IC1901	8-759-195-81	IC TC7S86FU	
IC1902	8-759-981-48	IC TL082M	
IC1903	8-759-092-82	IC SN75157PS-ELL2000	
IC1904	8-759-058-58	IC TC7S04FU(TE85R)	
IC1905	8-752-088-27	IC CXA3266Q-T6	
IC1906	8-759-012-02	IC MC10H124M	
IC1907	8-759-543-15	IC MC100EL91DWR2	
IC1909	8-759-285-61	IC PC74HC123D-T	
IC1910	8-759-563-11	IC CXD8773R	
IC1911	8-759-186-77	IC TC74VHC541F	
IC1912	8-759-082-58	IC TC7W08FU	
IC1914	8-759-058-62	IC TC7S08FU(TE85R)	
IC1915	8-759-196-97	IC TC7SH32FU-TE85R	
IC1916	8-759-058-62	IC TC7S08FU(TE85R)	
IC1917	8-759-058-62	IC TC7S08FU(TE85R)	
IC9001	8-759-295-09	IC TLC2932IPW	
IC9002	8-759-430-32	IC TLC2933IPWR	
IC9003	8-759-467-20	IC CXD8675R	
IC9004	8-759-285-61	IC PC74HC123D-T	
IC9005	8-759-447-90	IC TLC5733AIPM	
IC9101	8-759-422-80	IC MN47V77ST1	
IC9102	8-759-422-80	IC MN47V77ST1	
IC9103	8-759-422-80	IC MN47V77ST1	
IC9104	8-752-395-15	IC CXD2082Q	
IC9105	8-752-395-33	IC CXD2083Q	
IC9106	8-749-015-18	IC PQ07VZ012P	
IC9201	8-752-395-29	IC CXD2084Q	
IC9202	8-759-485-79	IC TC7SET08FU(TE85L)	
IC9203	8-759-485-79	IC TC7SET08FU(TE85L)	
IC9204	8-759-431-14	IC PQ3TZ53U	
IC9501	8-752-086-33	IC CXA2101AQ-TL	
	<COIL>		
L1001	1-412-525-11	INDUCTOR	10µH
L1002	1-412-064-11	INDUCTOR	100µH
L1003	1-412-525-31	INDUCTOR	10µH
L1004	1-412-525-31	INDUCTOR	10µH
L1005	1-412-525-31	INDUCTOR	10µH
L1006	1-412-064-11	INDUCTOR	100µH
L1008	1-412-058-11	INDUCTOR CHIP	10µH
L1009	1-412-058-11	INDUCTOR CHIP	10µH
L1101	1-412-058-11	INDUCTOR CHIP	10µH
L1102	1-412-064-21	INDUCTOR CHIP	100µH
L1103	1-412-058-11	INDUCTOR CHIP	10µH
L1104	1-412-058-11	INDUCTOR CHIP	10µH
L1105	1-412-058-11	INDUCTOR CHIP	10µH
L1106	1-412-064-21	INDUCTOR CHIP	100µH
L1251	1-410-200-31	INDUCTOR CHIP	4.7µH
L1252	1-412-058-11	INDUCTOR CHIP	10µH
L1253	1-414-753-91	INDUCTOR	4.7µH
L1254	1-414-753-91	INDUCTOR	4.7µH
L1255	1-412-058-11	INDUCTOR CHIP	10µH
L1256	1-412-058-11	INDUCTOR CHIP	10µH
L1257	1-412-064-21	INDUCTOR CHIP	100µH
L1258	1-412-064-21	INDUCTOR CHIP	100µH
L1259	1-412-058-11	INDUCTOR CHIP	10µH
L1401	1-412-058-11	INDUCTOR CHIP	10µH
L1402	1-412-058-11	INDUCTOR CHIP	10µH
L1403	1-412-058-11	INDUCTOR CHIP	10µH
L1404	1-414-235-22	INDUCTOR CHIP	0µH
L1405	1-412-058-11	INDUCTOR CHIP	10µH
L1406	1-414-235-22	INDUCTOR CHIP	0µH
L1407	1-412-796-41	INDUCTOR	47µH
L1408	1-412-058-11	INDUCTOR CHIP	10µH
L1409	1-414-754-11	INDUCTOR	10µH
L1411	1-412-058-11	INDUCTOR CHIP	10µH
L1901	1-412-058-11	INDUCTOR CHIP	10µH
L1902	1-412-058-11	INDUCTOR CHIP	10µH
L1903	1-412-058-11	INDUCTOR CHIP	10µH
L1904	1-412-058-11	INDUCTOR CHIP	10µH
L1905	1-412-058-11	INDUCTOR CHIP	10µH
L1906	1-412-058-11	INDUCTOR CHIP	10µH
L9001	1-414-754-11	INDUCTOR	10µH
L9002	1-414-757-11	INDUCTOR	100µH
L9003	1-414-757-11	INDUCTOR	100µH
L9004	1-414-757-11	INDUCTOR	100µH
L9005	1-414-754-11	INDUCTOR	10µH
L9006	1-414-757-11	INDUCTOR	100µH
L9007	1-414-757-11	INDUCTOR	100µH
L9008	1-414-754-11	INDUCTOR	10µH
L9009	1-414-754-11	INDUCTOR	10µH
L9010	1-414-754-11	INDUCTOR	10µH
L9011	1-414-754-11	INDUCTOR	10µH
L9012	1-414-754-11	INDUCTOR	10µH
L9101	1-414-754-11	INDUCTOR	10µH
L9102	1-414-754-11	INDUCTOR	10µH
L9103	1-414-754-11	INDUCTOR	10µH
L9104	1-412-052-21	INDUCTOR CHIP	1µH
L9201	1-414-754-11	INDUCTOR	10µH
L9202	1-414-754-11	INDUCTOR	10µH
L9203	1-414-754-11	INDUCTOR	10µH
L9204	1-414-754-11	INDUCTOR	10µH
L9501	1-412-058-11	INDUCTOR CHIP	10µH
L9502	1-412-058-11	INDUCTOR CHIP	10µH
L9503	1-412-058-11	INDUCTOR CHIP	10µH
L9504	1-412-058-11	INDUCTOR CHIP	10µH
L9505	1-412-058-11	INDUCTOR CHIP	10µH
	<TRANSISTOR>		
Q1001	8-729-107-31	TRANSISTOR 2SC3545-T43	
Q1002	8-729-107-31	TRANSISTOR 2SC3545-T43	
Q1003	8-729-107-31	TRANSISTOR 2SC3545-T43	
Q1101	8-729-230-49	TRANSISTOR 2SC2712-YG	
Q1102	8-729-216-22	TRANSISTOR 2SA1162-G	

BA

Ref.No.	Part No.	Description	Remark
Q1103	8-729-422-29	TRANSISTOR 2SD601A-S	
Q1105	8-729-230-49	TRANSISTOR 2SC2712-YG	
Q1106	8-729-216-22	TRANSISTOR 2SA1162-G	
Q1107	8-729-216-22	TRANSISTOR 2SA1162-G	
Q1108	8-729-230-49	TRANSISTOR 2SC2712-YG	
Q1110	8-729-216-22	TRANSISTOR 2SA1162-G	
Q1111	8-729-230-49	TRANSISTOR 2SC2712-YG	
Q1112	8-729-230-49	TRANSISTOR 2SC2712-YG	
Q1113	8-729-230-49	TRANSISTOR 2SC2712-YG	
Q1114	8-729-230-49	TRANSISTOR 2SC2712-YG	
Q1115	8-729-216-22	TRANSISTOR 2SA1162-G	
Q1116	8-729-230-49	TRANSISTOR 2SC2712-YG	
Q1117	8-729-230-49	TRANSISTOR 2SC2712-YG	
Q1118	8-729-216-22	TRANSISTOR 2SA1162-G	
Q1119	8-729-216-22	TRANSISTOR 2SA1162-G	
Q1120	8-729-230-49	TRANSISTOR 2SC2712-YG	
Q1121	8-729-230-49	TRANSISTOR 2SC2712-YG	
Q1122	8-729-216-22	TRANSISTOR 2SA1162-G	
Q1123	8-729-216-22	TRANSISTOR 2SA1162-G	
Q1124	8-729-216-22	TRANSISTOR 2SA1162-G	
Q1125	8-729-216-22	TRANSISTOR 2SA1162-G	
Q1126	8-729-230-49	TRANSISTOR 2SC2712-YG	
Q1127	8-729-230-49	TRANSISTOR 2SC2712-YG	
Q1128	8-729-230-49	TRANSISTOR 2SC2712-YG	
Q1129	8-729-230-49	TRANSISTOR 2SC2712-YG	
Q1251	8-729-216-22	TRANSISTOR 2SA1162-G	
Q1255	8-729-230-49	TRANSISTOR 2SC2712-YG	
Q1257	8-729-216-22	TRANSISTOR 2SA1162-G	
Q1260	8-729-230-49	TRANSISTOR 2SC2712-YG	
Q1261	8-729-216-22	TRANSISTOR 2SA1162-G	
Q1265	8-729-216-22	TRANSISTOR 2SA1162-G	
Q1268	8-729-230-49	TRANSISTOR 2SC2712-YG	
Q1269	8-729-230-49	TRANSISTOR 2SC2712-YG	
Q1270	8-729-230-49	TRANSISTOR 2SC2712-YG	
Q1271	8-729-216-22	TRANSISTOR 2SA1162-G	
Q1272	8-729-216-22	TRANSISTOR 2SA1162-G	
Q1273	8-729-230-49	TRANSISTOR 2SC2712-YG	
Q1274	8-729-230-49	TRANSISTOR 2SC2712-YG	
Q1275	8-729-216-22	TRANSISTOR 2SA1162-G	
Q1276	8-729-216-22	TRANSISTOR 2SA1162-G	
Q1277	8-729-216-22	TRANSISTOR 2SA1162-G	
Q1278	8-729-216-22	TRANSISTOR 2SA1162-G	
Q1279	8-729-230-49	TRANSISTOR 2SC2712-YG	
Q1280	8-729-230-49	TRANSISTOR 2SC2712-YG	
Q1281	8-729-230-49	TRANSISTOR 2SC2712-YG	
Q1282	8-729-230-49	TRANSISTOR 2SC2712-YG	
Q1401	8-729-230-49	TRANSISTOR 2SC2712-YG	
Q1402	1-801-806-11	TRANSISTOR DTC144EKA-T146	
Q1403	8-729-230-49	TRANSISTOR 2SC2712-YG	
Q1404	8-729-230-49	TRANSISTOR 2SC2712-YG	
Q1405	8-729-230-49	TRANSISTOR 2SC2712-YG	
Q1406	8-729-230-49	TRANSISTOR 2SC2712-YG	
Q1407	8-729-230-49	TRANSISTOR 2SC2712-YG	
Q1408	8-729-230-49	TRANSISTOR 2SC2712-YG	
Q1409	8-729-230-49	TRANSISTOR 2SC2712-YG	
Q1410	8-729-216-22	TRANSISTOR 2SA1162-G	
Q1411	8-729-903-10	TRANSISTOR FMW1	
Q1412	8-729-216-22	TRANSISTOR 2SA1162-G	
Q1413	8-729-230-49	TRANSISTOR 2SC2712-YG	
Q1414	8-729-107-31	TRANSISTOR 2SC3545-T43	
Q1415	8-729-230-49	TRANSISTOR 2SC2712-YG	
Q1416	8-729-230-49	TRANSISTOR 2SC2712-YG	
Q1417	8-729-230-49	TRANSISTOR 2SC2712-YG	
Q1418	8-729-230-49	TRANSISTOR 2SC2712-YG	
Q1419	8-729-230-49	TRANSISTOR 2SC2712-YG	
Q1420	8-729-230-49	TRANSISTOR 2SC2712-YG	
Q1422	8-729-230-49	TRANSISTOR 2SC2712-YG	
Q1423	8-729-230-49	TRANSISTOR 2SC2712-YG	
Q1424	8-729-230-49	TRANSISTOR 2SC2712-YG	
Q1425	8-729-230-49	TRANSISTOR 2SC2712-YG	
Q1426	8-729-422-29	TRANSISTOR 2SD601A-S	
Q1427	8-729-422-29	TRANSISTOR 2SD601A-S	
Q1428	8-729-422-29	TRANSISTOR 2SD601A-S	
Q1430	8-729-230-49	TRANSISTOR 2SC2712-YG	
Q1431	8-729-230-49	TRANSISTOR 2SC2712-YG	
Q1432	8-729-230-49	TRANSISTOR 2SC2712-YG	
Q1435	8-729-230-49	TRANSISTOR 2SC2712-YG	
Q1436	8-729-230-49	TRANSISTOR 2SC2712-YG	
Q1437	8-729-230-49	TRANSISTOR 2SC2712-YG	
Q1751	8-729-038-80	TRANSISTOR 2SA1182-Y(TE85R)	
Q1901	8-729-230-49	TRANSISTOR 2SC2712-YG	
Q1902	8-729-230-49	TRANSISTOR 2SC2712-YG	
Q1903	8-729-230-49	TRANSISTOR 2SC2712-YG	
Q1904	8-729-216-22	TRANSISTOR 2SA1162-G	
Q1905	8-729-230-49	TRANSISTOR 2SC2712-YG	
Q1907	8-729-216-22	TRANSISTOR 2SA1162-G	
Q9001	8-729-230-49	TRANSISTOR 2SC2712-YG	
Q9002	8-729-216-22	TRANSISTOR 2SA1162-G	
Q9003	8-729-230-49	TRANSISTOR 2SC2712-YG	
Q9004	8-729-230-49	TRANSISTOR 2SC2712-YG	
Q9201	8-729-216-22	TRANSISTOR 2SA1162-G	
Q9202	8-729-216-22	TRANSISTOR 2SA1162-G	
Q9203	8-729-216-22	TRANSISTOR 2SA1162-G	
Q9204	8-729-216-22	TRANSISTOR 2SA1162-G	
Q9205	8-729-216-22	TRANSISTOR 2SA1162-G	
Q9206	8-729-216-22	TRANSISTOR 2SA1162-G	
Q9501	8-729-902-96	TRANSISTOR FMS1	
Q9502	8-729-902-96	TRANSISTOR FMS1	
Q9503	8-729-902-96	TRANSISTOR FMS1	
Q9504	8-729-230-49	TRANSISTOR 2SC2712-YG	
Q9505	8-729-230-49	TRANSISTOR 2SC2712-YG	
Q9506	8-729-230-49	TRANSISTOR 2SC2712-YG	
	<RESISTOR>		
R1001	1-216-073-00	RES,CHIP 10K 5% 1/10W	
R1002	1-216-073-00	RES,CHIP 10K 5% 1/10W	
R1003	1-216-073-00	RES,CHIP 10K 5% 1/10W	
R1004	1-216-073-00	RES,CHIP 10K 5% 1/10W	
R1005	1-216-073-00	RES,CHIP 10K 5% 1/10W	
R1006	1-216-073-00	RES,CHIP 10K 5% 1/10W	
R1007	1-216-073-00	RES,CHIP 10K 5% 1/10W	
R1008	1-216-013-00	RES,CHIP 33 5% 1/10W	
R1009	1-216-073-00	RES,CHIP 10K 5% 1/10W	
R1010	1-216-025-91	RES,CHIP 100 5% 1/10W	
R1011	1-216-025-91	RES,CHIP 100 5% 1/10W	
R1012	1-216-025-91	RES,CHIP 100 5% 1/10W	
R1013	1-216-049-91	RES,CHIP 1K 5% 1/10W	
R1014	1-216-049-91	RES,CHIP 1K 5% 1/10W	
R1015	1-216-049-91	RES,CHIP 1K 5% 1/10W	
R1016	1-216-009-91	RES,CHIP 22 5% 1/10W	
R1017	1-216-009-91	RES,CHIP 22 5% 1/10W	
R1018	1-216-009-91	RES,CHIP 22 5% 1/10W	
R1019	1-216-025-91	RES,CHIP 100 5% 1/10W	
R1020	1-216-025-91	RES,CHIP 100 5% 1/10W	
R1021	1-216-025-91	RES,CHIP 100 5% 1/10W	
R1022	1-216-631-11	METAL CHIP 150 0.50% 1/10W	
R1023	1-216-631-11	METAL CHIP 150 0.50% 1/10W	
R1024	1-216-631-11	METAL CHIP 150 0.50% 1/10W	
R1025	1-216-631-11	METAL CHIP 150 0.50% 1/10W	
R1026	1-216-631-11	METAL CHIP 150 0.50% 1/10W	
R1027	1-216-631-11	METAL CHIP 150 0.50% 1/10W	

Ref.No.	Part No.	Description			Remark	
R1028	1-216-089-91	RES,CHIP	47K	5%	1/10W	
R1029	1-216-089-91	RES,CHIP	47K	5%	1/10W	
R1030	1-216-089-91	RES,CHIP	47K	5%	1/10W	
R1031	1-216-013-00	RES,CHIP	33	5%	1/10W	
R1032	1-216-073-00	RES,CHIP	10K	5%	1/10W	
R1033	1-216-073-00	RES,CHIP	10K	5%	1/10W	
R1034	1-216-073-00	RES,CHIP	10K	5%	1/10W	
R1035	1-216-073-00	RES,CHIP	10K	5%	1/10W	
R1036	1-216-073-00	RES,CHIP	10K	5%	1/10W	
R1037	1-216-073-00	RES,CHIP	10K	5%	1/10W	
R1038	1-216-073-00	RES,CHIP	10K	5%	1/10W	
R1039	1-216-073-00	RES,CHIP	10K	5%	1/10W	
R1040	1-216-013-91	RES,CHIP	33	5%	1/10W	
R1041	1-216-013-91	RES,CHIP	33	5%	1/10W	
R1042	1-216-013-91	RES,CHIP	33	5%	1/10W	
R1043	1-216-643-11	METAL CHIP	470	0.50%	1/10W	
R1044	1-216-643-11	METAL CHIP	470	0.50%	1/10W	
R1045	1-216-643-11	METAL CHIP	470	0.50%	1/10W	
R1046	1-216-025-91	RES,CHIP	100	5%	1/10W	
R1047	1-216-025-91	RES,CHIP	100	5%	1/10W	
R1048	1-216-025-91	RES,CHIP	100	5%	1/10W	
R1049	1-216-647-11	METAL CHIP	680	0.50%	1/10W	
R1050	1-216-647-11	METAL CHIP	680	0.50%	1/10W	
R1051	1-216-647-11	METAL CHIP	680	0.50%	1/10W	
R1052	1-216-049-91	RES,CHIP	1K	5%	1/10W	
R1053	1-216-049-91	RES,CHIP	1K	5%	1/10W	
R1054	1-216-049-91	RES,CHIP	1K	5%	1/10W	
R1055	1-216-005-00	RES,CHIP	15	5%	1/10W	
R1056	1-216-005-00	RES,CHIP	15	5%	1/10W	
R1057	1-216-005-00	RES,CHIP	15	5%	1/10W	
R1058	1-216-073-00	RES,CHIP	10K	5%	1/10W	
R1060	1-216-647-11	METAL CHIP	680	0.50%	1/10W	
R1061	1-216-659-11	METAL CHIP	2.2K	0.50%	1/10W	
R1062	1-216-659-11	METAL CHIP	2.2K	0.50%	1/10W	
R1063	1-216-073-00	RES,CHIP	10K	5%	1/10W	
R1064	1-216-073-00	RES,CHIP	10K	5%	1/10W	
R1065	1-216-295-91	SHORT	0			
R1066	1-216-295-91	SHORT	0			
R1067	1-216-025-91	RES,CHIP	100	5%	1/10W	
R1071	1-216-015-00	RES,CHIP	39	5%	1/10W	
R1072	1-216-015-00	RES,CHIP	39	5%	1/10W	
R1073	1-216-015-00	RES,CHIP	39	5%	1/10W	
R1074	1-216-295-91	SHORT	0			
R1075	1-216-295-91	SHORT	0			
R1076	1-216-295-91	SHORT	0			
R1077	1-216-295-91	SHORT	0			
R1082	1-216-399-00	METAL OXIDE	6.8	5%	3W	F
R1083	1-216-399-00	METAL OXIDE	6.8	5%	3W	F
R1084	1-216-623-11	METAL CHIP	68	0.50%	1/10W	
R1085	1-216-623-11	METAL CHIP	68	0.50%	1/10W	
R1086	1-216-623-11	METAL CHIP	68	0.50%	1/10W	
R1101	1-216-085-00	RES,CHIP	33K	5%	1/10W	
R1102	1-216-009-91	RES,CHIP	22	5%	1/10W	
R1103	1-216-009-91	RES,CHIP	22	5%	1/10W	
R1104	1-216-009-91	RES,CHIP	22	5%	1/10W	
R1105	1-216-017-91	RES,CHIP	47	5%	1/10W	
R1106	1-216-065-91	RES,CHIP	4.7K	5%	1/10W	
R1107	1-216-069-00	RES,CHIP	6.8K	5%	1/10W	
R1108	1-216-065-91	RES,CHIP	4.7K	5%	1/10W	
R1109	1-216-017-91	RES,CHIP	47	5%	1/10W	
R1110	1-216-057-00	RES,CHIP	2.2K	5%	1/10W	
R1111	1-216-057-00	RES,CHIP	2.2K	5%	1/10W	
R1112	1-216-037-00	RES,CHIP	330	5%	1/10W	
R1113	1-216-049-91	RES,CHIP	1K	5%	1/10W	
R1114	1-216-621-11	METAL CHIP	56	0.50%	1/10W	
R1115	1-216-657-11	METAL CHIP	1.8K	0.50%	1/10W	
R1116	1-216-073-00	RES,CHIP	10K	5%	1/10W	
R1117	1-216-017-91	RES,CHIP	47	5%	1/10W	
R1118	1-216-655-11	METAL CHIP	1.5K	0.50%	1/10W	
R1123	1-216-017-91	RES,CHIP	47	5%	1/10W	
R1124	1-216-025-91	RES,CHIP	100	5%	1/10W	
R1126	1-216-073-00	RES,CHIP	10K	5%	1/10W	
R1127	1-216-025-91	RES,CHIP	100	5%	1/10W	
R1128	1-216-073-00	RES,CHIP	10K	5%	1/10W	
R1129	1-216-049-91	RES,CHIP	1K	5%	1/10W	
R1130	1-216-025-91	RES,CHIP	100	5%	1/10W	
R1131	1-216-025-91	RES,CHIP	100	5%	1/10W	
R1132	1-216-009-91	RES,CHIP	22	5%	1/10W	
R1134	1-216-073-00	RES,CHIP	10K	5%	1/10W	
R1135	1-216-073-00	RES,CHIP	10K	5%	1/10W	
R1136	1-216-017-91	RES,CHIP	47	5%	1/10W	
R1137	1-216-025-91	RES,CHIP	100	5%	1/10W	
R1138	1-216-025-91	RES,CHIP	100	5%	1/10W	
R1139	1-216-089-91	RES,CHIP	47K	5%	1/10W	
R1143	1-216-073-00	RES,CHIP	10K	5%	1/10W	
R1144	1-216-089-91	RES,CHIP	47K	5%	1/10W	
R1145	1-216-065-91	RES,CHIP	4.7K	5%	1/10W	
R1146	1-216-025-91	RES,CHIP	100	5%	1/10W	
R1147	1-216-049-91	RES,CHIP	1K	5%	1/10W	
R1148	1-216-061-00	RES,CHIP	3.3K	5%	1/10W	
R1149	1-216-057-00	RES,CHIP	2.2K	5%	1/10W	
R1150	1-216-651-11	METAL CHIP	1K	0.50%	1/10W	
R1151	1-216-631-11	METAL CHIP	150	0.50%	1/10W	
R1152	1-216-033-00	RES,CHIP	220	5%	1/10W	
R1154	1-216-025-91	RES,CHIP	100	5%	1/10W	
R1155	1-216-651-11	METAL CHIP	1K	0.50%	1/10W	
R1156	1-216-053-00	RES,CHIP	1.5K	5%	1/10W	
R1157	1-216-073-00	RES,CHIP	10K	5%	1/10W	
R1158	1-216-051-00	RES,CHIP	1.2K	5%	1/10W	
R1159	1-216-047-91	RES,CHIP	820	5%	1/10W	
R1160	1-216-057-00	RES,CHIP	2.2K	5%	1/10W	
R1161	1-216-657-11	METAL CHIP	1.8K	0.50%	1/10W	
R1162	1-216-025-91	RES,CHIP	100	5%	1/10W	
R1163	1-216-657-11	METAL CHIP	1.8K	0.50%	1/10W	
R1164	1-216-057-00	RES,CHIP	2.2K	5%	1/10W	
R1165	1-216-661-11	METAL CHIP	2.7K	0.50%	1/10W	
R1166	1-216-017-91	RES,CHIP	47	5%	1/10W	
R1168	1-216-017-91	RES,CHIP	47	5%	1/10W	
R1169	1-216-017-91	RES,CHIP	47	5%	1/10W	
R1170	1-216-041-00	RES,CHIP	470	5%	1/10W	
R1171	1-216-017-91	RES,CHIP	47	5%	1/10W	
R1172	1-216-031-00	RES,CHIP	180	5%	1/10W	
R1173	1-216-049-91	RES,CHIP	1K	5%	1/10W	
R1174	1-216-049-91	RES,CHIP	1K	5%	1/10W	
R1175	1-216-031-00	RES,CHIP	180	5%	1/10W	
R1176	1-216-651-11	METAL CHIP	1K	0.50%	1/10W	
R1177	1-216-057-00	RES,CHIP	2.2K	5%	1/10W	
R1178	1-216-651-11	METAL CHIP	1K	0.50%	1/10W	
R1179	1-216-659-11	METAL CHIP	2.2K	0.50%	1/10W	
R1180	1-216-017-91	RES,CHIP	47	5%	1/10W	
R1181	1-216-017-91	RES,CHIP	47	5%	1/10W	
R1182	1-216-651-11	METAL CHIP	1K	0.50%	1/10W	
R1183	1-216-651-11	METAL CHIP	1K	0.50%	1/10W	
R1184	1-216-665-11	METAL CHIP	3.9K	0.50%	1/10W	
R1185	1-216-065-91	RES,CHIP	4.7K	5%	1/10W	
R1186	1-216-017-91	RES,CHIP	47	5%	1/10W	
R1187	1-216-017-91	RES,CHIP	47	5%	1/10W	
R1188	1-216-065-91	RES,CHIP	4.7K	5%	1/10W	
R1189	1-216-051-00	RES,CHIP	1.2K	5%	1/10W	
R1190	1-216-065-91	RES,CHIP	4.7K	5%	1/10W	
R1191	1-216-051-00	RES,CHIP	1.2K	5%	1/10W	
R1192	1-216-069-00	RES,CHIP	6.8K	5%	1/10W	

BA

Ref.No.	Part No.	Description			Remark
R1193	1-216-049-91	RES,CHIP	1K	5%	1/10W
R1194	1-216-669-11	METAL CHIP	5.6K	0.50%	1/10W
R1195	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R1196	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R1197	1-216-025-91	RES,CHIP	100	5%	1/10W
R1198	1-216-025-91	RES,CHIP	100	5%	1/10W
R1199	1-216-025-91	RES,CHIP	100	5%	1/10W
R1200	1-216-017-91	RES,CHIP	47	5%	1/10W
R1201	1-216-017-91	RES,CHIP	47	5%	1/10W
R1202	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R1203	1-216-097-91	RES,CHIP	100K	5%	1/10W
R1204	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R1205	1-216-097-91	RES,CHIP	100K	5%	1/10W
R1206	1-216-013-00	RES,CHIP	33	5%	1/10W
R1207	1-216-059-00	RES,CHIP	2.7K	5%	1/10W
R1208	1-216-059-00	RES,CHIP	2.7K	5%	1/10W
R1209	1-216-013-00	RES,CHIP	33	5%	1/10W
R1210	1-216-025-91	RES,CHIP	100	5%	1/10W
R1211	1-216-073-00	RES,CHIP	10K	5%	1/10W
R1212	1-216-017-91	RES,CHIP	47	5%	1/10W
R1213	1-216-295-91	SHORT	0		
R1214	1-216-097-91	RES,CHIP	100K	5%	1/10W
R1215	1-247-835-11	RES,CHIP	1.5K	5%	1/4W
R1252	1-216-121-91	RES,CHIP	1M	5%	1/10W
R1253	1-216-295-91	SHORT	0		
R1256	1-216-053-00	RES,CHIP	1.5K	5%	1/10W
R1257	1-216-041-00	RES,CHIP	470	5%	1/10W
R1258	1-216-055-00	RES,CHIP	1.8K	5%	1/10W
R1259	1-216-055-00	RES,CHIP	1.8K	5%	1/10W
R1260	1-216-055-00	RES,CHIP	1.8K	5%	1/10W
R1261	1-216-055-00	RES,CHIP	1.8K	5%	1/10W
R1263	1-216-025-91	RES,CHIP	100	5%	1/10W
R1264	1-216-073-00	RES,CHIP	10K	5%	1/10W
R1265	1-216-025-91	RES,CHIP	100	5%	1/10W
R1266	1-216-055-00	RES,CHIP	1.8K	5%	1/10W
R1267	1-216-055-00	RES,CHIP	1.8K	5%	1/10W
R1268	1-216-023-00	RES,CHIP	82	5%	1/10W
R1269	1-216-691-11	METAL CHIP	47K	0.50%	1/10W
R1270	1-216-025-91	RES,CHIP	100	5%	1/10W
R1271	1-216-025-91	RES,CHIP	100	5%	1/10W
R1272	1-216-025-91	RES,CHIP	100	5%	1/10W
R1273	1-216-623-11	METAL CHIP	68	0.50%	1/10W
R1274	1-216-025-91	RES,CHIP	100	5%	1/10W
R1275	1-216-017-91	RES,CHIP	47	5%	1/10W
R1276	1-216-679-11	METAL CHIP	15K	0.50%	1/10W
R1277	1-216-025-91	RES,CHIP	100	5%	1/10W
R1278	1-216-025-91	RES,CHIP	100	5%	1/10W
R1279	1-216-025-91	RES,CHIP	100	5%	1/10W
R1280	1-216-025-91	RES,CHIP	100	5%	1/10W
R1283	1-216-295-91	SHORT	0		
R1290	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R1293	1-216-049-91	RES,CHIP	1K	5%	1/10W
R1294	1-216-041-00	RES,CHIP	470	5%	1/10W
R1300	1-216-049-91	RES,CHIP	1K	5%	1/10W
R1301	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R1303	1-216-049-91	RES,CHIP	1K	5%	1/10W
R1307	1-216-071-00	RES,CHIP	8.2K	5%	1/10W
R1308	1-216-105-91	RES,CHIP	220K	5%	1/10W
R1309	1-216-025-91	RES,CHIP	100	5%	1/10W
R1314	1-216-033-00	RES,CHIP	220	5%	1/10W
R1325	1-216-645-11	METAL CHIP	560	0.50%	1/10W
R1326	1-216-647-11	METAL CHIP	680	0.50%	1/10W
R1327	1-216-669-11	METAL CHIP	5.6K	0.50%	1/10W
R1328	1-216-295-91	SHORT	0		
R1333	1-216-645-11	METAL CHIP	560	0.50%	1/10W
R1334	1-216-049-91	RES,CHIP	1K	5%	1/10W
R1335	1-216-025-91	RES,CHIP	100	5%	1/10W
R1337	1-216-017-91	RES,CHIP	47	5%	1/10W
R1338	1-216-017-91	RES,CHIP	47	5%	1/10W
R1340	1-216-651-11	METAL CHIP	1K	0.50%	1/10W
R1341	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R1342	1-216-651-11	METAL CHIP	1K	0.50%	1/10W
R1343	1-216-659-11	METAL CHIP	2.2K	0.50%	1/10W
R1344	1-216-651-11	METAL CHIP	1K	0.50%	1/10W
R1345	1-216-651-11	METAL CHIP	1K	0.50%	1/10W
R1346	1-216-669-11	METAL CHIP	5.6K	0.50%	1/10W
R1347	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R1348	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R1349	1-216-051-00	RES,CHIP	1.2K	5%	1/10W
R1350	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R1351	1-216-051-00	RES,CHIP	1.2K	5%	1/10W
R1352	1-216-671-11	METAL CHIP	6.8K	0.50%	1/10W
R1353	1-216-677-11	METAL CHIP	12K	0.50%	1/10W
R1354	1-216-049-91	RES,CHIP	1K	5%	1/10W
R1355	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R1356	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R1357	1-216-025-91	RES,CHIP	100	5%	1/10W
R1358	1-216-025-91	RES,CHIP	100	5%	1/10W
R1359	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R1360	1-216-097-91	RES,CHIP	100K	5%	1/10W
R1361	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R1362	1-216-097-91	RES,CHIP	100K	5%	1/10W
R1363	1-216-059-00	RES,CHIP	2.7K	5%	1/10W
R1364	1-216-059-00	RES,CHIP	2.7K	5%	1/10W
R1365	1-216-017-91	RES,CHIP	47	5%	1/10W
R1366	1-216-017-91	RES,CHIP	47	5%	1/10W
R1401	1-216-017-91	RES,CHIP	47	5%	1/10W
R1403	1-216-017-91	RES,CHIP	47	5%	1/10W
R1404	1-216-053-00	RES,CHIP	1.5K	5%	1/10W
R1405	1-216-049-91	RES,CHIP	1K	5%	1/10W
R1406	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R1407	1-216-053-00	RES,CHIP	1.5K	5%	1/10W
R1408	1-216-073-00	RES,CHIP	10K	5%	1/10W
R1409	1-216-017-91	RES,CHIP	47	5%	1/10W
R1410	1-216-025-91	RES,CHIP	100	5%	1/10W
R1411	1-216-089-91	RES,CHIP	47K	5%	1/10W
R1412	1-216-025-91	RES,CHIP	100	5%	1/10W
R1413	1-216-025-91	RES,CHIP	100	5%	1/10W
R1414	1-216-025-91	RES,CHIP	100	5%	1/10W
R1415	1-216-073-00	RES,CHIP	10K	5%	1/10W
R1416	1-216-647-11	METAL CHIP	680	0.50%	1/10W
R1417	1-216-063-91	RES,CHIP	3.9K	5%	1/10W
R1418	1-216-089-91	RES,CHIP	47K	5%	1/10W
R1419	1-216-059-00	RES,CHIP	2.7K	5%	1/10W
R1420	1-216-089-91	RES,CHIP	47K	5%	1/10W
R1421	1-216-651-11	METAL CHIP	1K	0.50%	1/10W
R1422	1-216-653-11	METAL CHIP	1.2K	0.50%	1/10W
R1423	1-216-651-11	METAL CHIP	1K	0.50%	1/10W
R1424	1-216-653-11	METAL CHIP	1.2K	0.50%	1/10W
R1425	1-216-063-91	RES,CHIP	3.9K	5%	1/10W
R1426	1-216-647-11	METAL CHIP	680	0.50%	1/10W
R1427	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R1428	1-216-017-91	RES,CHIP	47	5%	1/10W
R1429	1-216-295-91	SHORT	0		
R1430	1-216-097-91	RES,CHIP	100K	5%	1/10W
R1431	1-216-091-00	RES,CHIP	56K	5%	1/10W
R1432	1-216-017-91	RES,CHIP	47	5%	1/10W
R1433	1-216-017-91	RES,CHIP	47	5%	1/10W
R1434	1-216-669-11	METAL CHIP	5.6K	0.50%	1/10W
R1435	1-216-017-91	RES,CHIP	47	5%	1/10W
R1436	1-216-089-91	RES,CHIP	47K	5%	1/10W
R1437	1-216-017-91	RES,CHIP	47	5%	1/10W

Ref.No.	Part No.	Description			Remark
R1438	1-216-053-00	RES,CHIP	1.5K	5%	1/10W
R1439	1-216-033-00	RES,CHIP	220	5%	1/10W
R1440	1-216-089-91	RES,CHIP	47K	5%	1/10W
R1441	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R1442	1-216-089-91	RES,CHIP	47K	5%	1/10W
R1443	1-216-049-91	RES,CHIP	1K	5%	1/10W
R1444	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R1445	1-216-049-91	RES,CHIP	1K	5%	1/10W
R1446	1-216-049-91	RES,CHIP	1K	5%	1/10W
R1447	1-216-047-91	RES,CHIP	820	5%	1/10W
R1448	1-216-017-91	RES,CHIP	47	5%	1/10W
R1449	1-216-017-91	RES,CHIP	47	5%	1/10W
R1450	1-216-073-00	RES,CHIP	10K	5%	1/10W
R1451	1-216-017-91	RES,CHIP	47	5%	1/10W
R1452	1-216-049-91	RES,CHIP	1K	5%	1/10W
R1453	1-216-049-91	RES,CHIP	1K	5%	1/10W
R1454	1-216-643-11	METAL CHIP	470	0.50%	1/10W
R1455	1-216-643-11	METAL CHIP	470	0.50%	1/10W
R1456	1-216-643-11	METAL CHIP	470	0.50%	1/10W
R1457	1-216-667-11	METAL CHIP	4.7K	0.50%	1/10W
R1458	1-216-659-11	METAL CHIP	2.2K	0.50%	1/10W
R1459	1-216-657-11	METAL CHIP	1.8K	0.50%	1/10W
R1460	1-216-663-11	METAL CHIP	3.3K	0.50%	1/10W
R1461	1-216-667-11	METAL CHIP	4.7K	0.50%	1/10W
R1462	1-216-659-11	METAL CHIP	2.2K	0.50%	1/10W
R1463	1-216-655-11	METAL CHIP	1.5K	0.50%	1/10W
R1464	1-216-659-11	METAL CHIP	2.2K	0.50%	1/10W
R1465	1-216-017-91	RES,CHIP	47	5%	1/10W
R1466	1-216-295-91	SHORT	0		
R1467	1-216-049-91	RES,CHIP	1K	5%	1/10W
R1468	1-216-017-91	RES,CHIP	47	5%	1/10W
R1469	1-216-017-91	RES,CHIP	47	5%	1/10W
R1470	1-218-767-11	METAL CHIP	430K	0.50%	1/10W
R1471	1-216-653-11	METAL CHIP	1.2K	0.50%	1/10W
R1472	1-216-659-11	METAL CHIP	2.2K	0.50%	1/10W
R1473	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R1475	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R1476	1-216-101-00	RES,CHIP	150K	5%	1/10W
R1477	1-216-089-91	RES,CHIP	47K	5%	1/10W
R1478	1-216-017-91	RES,CHIP	47	5%	1/10W
R1482	1-216-017-91	RES,CHIP	47	5%	1/10W
R1483	1-216-017-91	RES,CHIP	47	5%	1/10W
R1484	1-216-017-91	RES,CHIP	47	5%	1/10W
R1485	1-216-017-91	RES,CHIP	47	5%	1/10W
R1486	1-216-017-91	RES,CHIP	47	5%	1/10W
R1487	1-216-017-91	RES,CHIP	47	5%	1/10W
R1488	1-216-017-91	RES,CHIP	47	5%	1/10W
R1489	1-216-017-91	RES,CHIP	47	5%	1/10W
R1490	1-216-017-91	RES,CHIP	47	5%	1/10W
R1491	1-216-081-00	RES,CHIP	22K	5%	1/10W
R1492	1-216-085-00	RES,CHIP	33K	5%	1/10W
R1493	1-216-081-00	RES,CHIP	22K	5%	1/10W
R1494	1-216-085-00	RES,CHIP	33K	5%	1/10W
R1495	1-216-081-00	RES,CHIP	22K	5%	1/10W
R1496	1-216-085-00	RES,CHIP	33K	5%	1/10W
R1497	1-216-025-91	RES,CHIP	100	5%	1/10W
R1498	1-216-025-91	RES,CHIP	100	5%	1/10W
R1499	1-216-025-91	RES,CHIP	100	5%	1/10W
R1500	1-216-025-91	RES,CHIP	100	5%	1/10W
R1501	1-216-053-00	RES,CHIP	1.5K	5%	1/10W
R1502	1-216-053-00	RES,CHIP	1.5K	5%	1/10W
R1503	1-216-049-91	RES,CHIP	1K	5%	1/10W
R1504	1-216-053-00	RES,CHIP	1.5K	5%	1/10W
R1505	1-216-645-11	METAL CHIP	560	0.50%	1/10W
R1506	1-216-645-11	METAL CHIP	560	0.50%	1/10W
R1507	1-216-645-11	METAL CHIP	560	0.50%	1/10W
R1508	1-216-025-91	RES,CHIP	100	5%	1/10W
R1509	1-216-049-91	RES,CHIP	1K	5%	1/10W
R1510	1-216-669-11	METAL CHIP	5.6K	0.50%	1/10W
R1511	1-216-669-11	METAL CHIP	5.6K	0.50%	1/10W
R1512	1-216-669-11	METAL CHIP	5.6K	0.50%	1/10W
R1513	1-216-025-91	RES,CHIP	100	5%	1/10W
R1514	1-216-025-91	RES,CHIP	100	5%	1/10W
R1515	1-216-037-00	RES,CHIP	330	5%	1/10W
R1516	1-216-037-00	RES,CHIP	330	5%	1/10W
R1517	1-216-037-00	RES,CHIP	330	5%	1/10W
R1526	1-216-049-91	RES,CHIP	1K	5%	1/10W
R1528	1-216-049-91	RES,CHIP	1K	5%	1/10W
R1530	1-216-049-91	RES,CHIP	1K	5%	1/10W
R1535	1-216-295-91	SHORT	0		
R1536	1-216-017-91	RES,CHIP	47	5%	1/10W
R1537	1-216-017-91	RES,CHIP	47	5%	1/10W
R1538	1-216-017-91	RES,CHIP	47	5%	1/10W
R1539	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R1540	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R1541	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R1754	1-216-295-91	SHORT	0		
R1759	1-216-039-00	RES,CHIP	390	5%	1/10W
R1760	1-216-039-00	RES,CHIP	390	5%	1/10W
R1761	1-216-039-00	RES,CHIP	390	5%	1/10W
R1762	1-216-039-00	RES,CHIP	390	5%	1/10W
R1766	1-216-039-00	RES,CHIP	390	5%	1/10W
R1767	1-216-039-00	RES,CHIP	390	5%	1/10W
R1768	1-216-039-00	RES,CHIP	390	5%	1/10W
R1769	1-216-039-00	RES,CHIP	390	5%	1/10W
R1770	1-216-039-00	RES,CHIP	390	5%	1/10W
R1771	1-216-039-00	RES,CHIP	390	5%	1/10W
R1772	1-216-039-00	RES,CHIP	390	5%	1/10W
R1773	1-216-039-00	RES,CHIP	390	5%	1/10W
R1774	1-216-295-91	SHORT	0		
R1777	1-216-039-00	RES,CHIP	390	5%	1/10W
R1778	1-216-039-00	RES,CHIP	390	5%	1/10W
R1781	1-216-039-00	RES,CHIP	390	5%	1/10W
R1782	1-216-039-00	RES,CHIP	390	5%	1/10W
R1783	1-216-039-00	RES,CHIP	390	5%	1/10W
R1784	1-216-039-00	RES,CHIP	390	5%	1/10W
R1785	1-216-039-00	RES,CHIP	390	5%	1/10W
R1786	1-216-039-00	RES,CHIP	390	5%	1/10W
R1787	1-216-039-00	RES,CHIP	390	5%	1/10W
R1788	1-216-039-00	RES,CHIP	390	5%	1/10W
R1789	1-216-039-00	RES,CHIP	390	5%	1/10W
R1790	1-216-039-00	RES,CHIP	390	5%	1/10W
R1791	1-216-039-00	RES,CHIP	390	5%	1/10W
R1792	1-216-039-00	RES,CHIP	390	5%	1/10W
R1793	1-216-039-00	RES,CHIP	390	5%	1/10W
R1794	1-216-039-00	RES,CHIP	390	5%	1/10W
R1795	1-216-039-00	RES,CHIP	390	5%	1/10W
R1796	1-216-039-00	RES,CHIP	390	5%	1/10W
R1797	1-216-039-00	RES,CHIP	390	5%	1/10W
R1799	1-216-039-00	RES,CHIP	390	5%	1/10W
R1802	1-216-025-91	RES,CHIP	100	5%	1/10W
R1807	1-216-039-00	RES,CHIP	390	5%	1/10W
R1808	1-216-039-00	RES,CHIP	390	5%	1/10W
R1809	1-216-039-00	RES,CHIP	390	5%	1/10W
R1810	1-216-039-00	RES,CHIP	390	5%	1/10W
R1811	1-216-039-00	RES,CHIP	390	5%	1/10W
R1812	1-216-039-00	RES,CHIP	390	5%	1/10W
R1813	1-216-039-00	RES,CHIP	390	5%	1/10W
R1814	1-216-039-00	RES,CHIP	390	5%	1/10W
R1815	1-216-039-00	RES,CHIP	390	5%	1/10W
R1816	1-216-039-00	RES,CHIP	390	5%	1/10W
R1817	1-216-039-00	RES,CHIP	390	5%	1/10W

BA

Ref.No.	Part No.	Description			Remark
R1818	1-216-039-00	RES,CHIP	390	5%	1/10W
R1819	1-216-039-00	RES,CHIP	390	5%	1/10W
R1820	1-216-039-00	RES,CHIP	390	5%	1/10W
R1821	1-216-039-00	RES,CHIP	390	5%	1/10W
R1822	1-216-039-00	RES,CHIP	390	5%	1/10W
R1823	1-216-295-91	SHORT	0		
R1827	1-216-651-11	METAL CHIP	1K	0.50%	1/10W
R1828	1-216-649-11	METAL CHIP	820	0.50%	1/10W
R1829	1-216-025-91	RES,CHIP	100	5%	1/10W
R1830	1-216-651-11	METAL CHIP	1K	0.50%	1/10W
R1831	1-216-049-91	RES,CHIP	1K	5%	1/10W
R1832	1-216-295-91	SHORT	0		
R1833	1-216-295-91	SHORT	0		
R1834	1-216-295-91	SHORT	0		
R1901	1-216-025-91	RES,CHIP	100	5%	1/10W
R1902	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R1905	1-216-013-00	RES,CHIP	33	5%	1/10W
R1906	1-216-013-00	RES,CHIP	33	5%	1/10W
R1907	1-216-013-00	RES,CHIP	33	5%	1/10W
R1909	1-216-013-00	RES,CHIP	33	5%	1/10W
R1910	1-216-013-00	RES,CHIP	33	5%	1/10W
R1914	1-216-025-91	RES,CHIP	100	5%	1/10W
R1916	1-216-069-00	RES,CHIP	6.8K	5%	1/10W
R1917	1-216-033-00	RES,CHIP	220	5%	1/10W
R1918	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R1919	1-216-049-91	RES,CHIP	1K	5%	1/10W
R1920	1-216-639-11	METAL CHIP	330	0.50%	1/10W
R1921	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R1922	1-216-631-11	METAL CHIP	150	0.50%	1/10W
R1923	1-216-049-91	RES,CHIP	1K	5%	1/10W
R1924	1-216-025-91	RES,CHIP	100	5%	1/10W
R1927	1-216-025-91	RES,CHIP	100	5%	1/10W
R1928	1-216-013-00	RES,CHIP	33	5%	1/10W
R1929	1-216-013-00	RES,CHIP	33	5%	1/10W
R1930	1-216-025-91	RES,CHIP	100	5%	1/10W
R1931	1-216-013-00	RES,CHIP	33	5%	1/10W
R1932	1-216-025-91	RES,CHIP	100	5%	1/10W
R1934	1-216-089-91	RES,CHIP	47K	5%	1/10W
R1935	1-216-025-91	RES,CHIP	100	5%	1/10W
R1936	1-216-025-91	RES,CHIP	100	5%	1/10W
R1937	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R1938	1-216-053-00	RES,CHIP	1.5K	5%	1/10W
R1939	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R1940	1-216-013-00	RES,CHIP	33	5%	1/10W
R1941	1-216-025-91	RES,CHIP	100	5%	1/10W
R1942	1-216-656-11	METAL CHIP	1.6K	0.50%	1/10W
R1943	1-216-663-11	METAL CHIP	3.3K	0.50%	1/10W
R1948	1-216-295-91	SHORT	0		
R1949	1-216-295-91	SHORT	0		
R1950	1-216-295-91	SHORT	0		
R1952	1-216-295-91	SHORT	0		
R1956	1-216-039-00	RES,CHIP	390	5%	1/10W
R1957	1-216-039-00	RES,CHIP	390	5%	1/10W
R1958	1-216-039-00	RES,CHIP	390	5%	1/10W
R1959	1-216-039-00	RES,CHIP	390	5%	1/10W
R1960	1-216-039-00	RES,CHIP	390	5%	1/10W
R1961	1-216-039-00	RES,CHIP	390	5%	1/10W
R1962	1-216-039-00	RES,CHIP	390	5%	1/10W
R1963	1-216-039-00	RES,CHIP	390	5%	1/10W
R1964	1-216-037-00	RES,CHIP	330	5%	1/10W
R1965	1-216-037-00	RES,CHIP	330	5%	1/10W
R1966	1-216-037-00	RES,CHIP	330	5%	1/10W
R1967	1-216-037-00	RES,CHIP	330	5%	1/10W
R1968	1-216-295-91	SHORT	0		
R1969	1-216-295-91	SHORT	0		
R1970	1-216-295-91	SHORT	0		
R1971	1-216-295-91	SHORT	0		
R1972	1-216-039-00	RES,CHIP	390	5%	1/10W
R1973	1-216-039-00	RES,CHIP	390	5%	1/10W
R1974	1-216-295-91	SHORT	0		
R1975	1-216-295-91	SHORT	0		
R1976	1-216-073-00	RES,CHIP	10K	5%	1/10W
R1977	1-216-025-91	RES,CHIP	100	5%	1/10W
R1978	1-216-049-91	RES,CHIP	1K	5%	1/10W
R1979	1-216-073-00	RES,CHIP	10K	5%	1/10W
R1980	1-216-295-91	SHORT	0		
R1981	1-216-295-91	SHORT	0		
R1982	1-216-295-91	SHORT	0		
R1983	1-216-295-91	SHORT	0		
R1992	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R1993	1-216-037-00	RES,CHIP	330	5%	1/10W
R1994	1-216-073-00	RES,CHIP	10K	5%	1/10W
R1995	1-216-073-00	RES,CHIP	10K	5%	1/10W
R1996	1-216-073-00	RES,CHIP	10K	5%	1/10W
R1997	1-216-073-00	RES,CHIP	10K	5%	1/10W
R1998	1-216-013-00	RES,CHIP	33	5%	1/10W
R1999	1-216-013-00	RES,CHIP	33	5%	1/10W
R9001	1-216-295-91	SHORT	0		
R9002	1-216-047-91	RES,CHIP	820	5%	1/10W
R9003	1-216-037-00	RES,CHIP	330	5%	1/10W
R9004	1-216-037-00	RES,CHIP	330	5%	1/10W
R9005	1-216-295-91	SHORT	0		
R9006	1-216-049-91	RES,CHIP	1K	5%	1/10W
R9007	1-216-117-00	RES,CHIP	680K	5%	1/10W
R9008	1-216-097-91	RES,CHIP	100K	5%	1/10W
R9009	1-216-066-00	RES,CHIP	5.1K	5%	1/10W
R9010	1-216-117-00	RES,CHIP	680K	5%	1/10W
R9011	1-216-295-91	SHORT	0		
R9013	1-216-113-00	RES,CHIP	470K	5%	1/10W
R9014	1-216-081-00	RES,CHIP	22K	5%	1/10W
R9015	1-216-025-91	RES,CHIP	100	5%	1/10W
R9016	1-216-025-91	RES,CHIP	100	5%	1/10W
R9017	1-216-033-00	RES,CHIP	220	5%	1/10W
R9018	1-216-081-00	RES,CHIP	22K	5%	1/10W
R9019	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R9020	1-216-091-00	RES,CHIP	56K	5%	1/10W
R9021	1-216-061-00	RES,CHIP	3.3K	5%	1/10W
R9022	1-216-062-00	RES,CHIP	3.6K	5%	1/10W
R9024	1-216-113-00	RES,CHIP	470K	5%	1/10W
R9025	1-216-073-00	RES,CHIP	10K	5%	1/10W
R9027	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R9028	1-216-061-00	RES,CHIP	3.3K	5%	1/10W
R9029	1-216-049-91	RES,CHIP	1K	5%	1/10W
R9034	1-216-621-11	METAL CHIP	56	0.50%	1/10W
R9035	1-216-621-11	METAL CHIP	56	0.50%	1/10W
R9036	1-216-623-11	METAL CHIP	68	0.50%	1/10W
R9037	1-216-623-11	METAL CHIP	68	0.50%	1/10W
R9038	1-216-025-91	RES,CHIP	100	5%	1/10W
R9039	1-216-621-11	METAL CHIP	56	0.50%	1/10W
R9040	1-216-295-91	SHORT	0		
R9041	1-216-621-11	METAL CHIP	56	0.50%	1/10W
R9042	1-216-077-91	RES,CHIP	15K	5%	1/10W
R9043	1-216-077-91	RES,CHIP	15K	5%	1/10W
R9044	1-216-077-91	RES,CHIP	15K	5%	1/10W
R9045	1-216-621-11	METAL CHIP	56	0.50%	1/10W
R9046	1-216-295-91	SHORT	0		
R9047	1-216-295-91	SHORT	0		
R9048	1-216-621-11	METAL CHIP	56	0.50%	1/10W
R9049	1-216-624-11	METAL CHIP	75	0.50%	1/10W
R9050	1-216-621-11	METAL CHIP	56	0.50%	1/10W
R9051	1-216-621-11	METAL CHIP	56	0.50%	1/10W
R9052	1-216-624-11	METAL CHIP	75	0.50%	1/10W

Ref.No.	Part No.	Description		Remark	
R9053	1-216-667-11	METAL CHIP	4.7K	0.50%	1/10W
R9054	1-216-651-11	METAL CHIP	1K	0.50%	1/10W
R9055	1-216-025-91	RES,CHIP	100	5%	1/10W
R9101	1-216-295-91	SHORT	0		
R9104	1-216-295-91	SHORT	0		
R9106	1-216-295-91	SHORT	0		
R9108	1-216-295-91	SHORT	0		
R9110	1-216-295-91	SHORT	0		
R9111	1-216-295-91	SHORT	0		
R9113	1-216-651-11	METAL CHIP	1K	0.50%	1/10W
R9114	1-216-649-11	METAL CHIP	820	0.50%	1/10W
R9115	1-216-675-91	METAL CHIP	10K	0.50%	1/10W
R9117	1-216-295-91	SHORT	0		
R9120	1-216-295-91	SHORT	0		
R9121	1-216-295-91	SHORT	0		
R9123	1-216-295-91	SHORT	0		
R9126	1-216-295-91	SHORT	0		
R9128	1-216-295-91	SHORT	0		
R9130	1-216-295-91	SHORT	0		
R9133	1-216-295-91	SHORT	0		
R9135	1-216-295-91	SHORT	0		
R9201	1-216-073-00	RES,CHIP	10K	5%	1/10W
R9203	1-216-073-00	RES,CHIP	10K	5%	1/10W
R9205	1-216-295-91	SHORT	0		
R9208	1-216-295-91	SHORT	0		
R9209	1-216-295-91	SHORT	0		
R9211	1-216-295-91	SHORT	0		
R9214	1-216-295-91	SHORT	0		
R9216	1-216-295-91	SHORT	0		
R9217	1-216-295-91	SHORT	0		
R9219	1-216-295-91	SHORT	0		
R9222	1-216-295-91	SHORT	0		
R9223	1-216-295-91	SHORT	0		
R9226	1-216-295-91	SHORT	0		
R9228	1-216-295-91	SHORT	0		
R9230	1-216-295-91	SHORT	0		
R9231	1-216-295-91	SHORT	0		
R9233	1-216-025-91	RES,CHIP	100	5%	1/10W
R9234	1-216-025-91	RES,CHIP	100	5%	1/10W
R9239	1-216-295-91	SHORT	0		
R9243	1-216-295-91	SHORT	0		
R9244	1-216-295-91	SHORT	0		
R9245	1-216-295-91	SHORT	0		
R9246	1-216-295-91	SHORT	0		
R9249	1-216-663-11	METAL CHIP	3.3K	0.50%	1/10W
R9252	1-216-637-11	METAL CHIP	270	0.50%	1/10W
R9253	1-216-646-11	METAL CHIP	620	0.50%	1/10W
R9254	1-216-635-11	METAL CHIP	220	0.50%	1/10W
R9255	1-216-635-11	METAL CHIP	220	0.50%	1/10W
R9256	1-216-635-11	METAL CHIP	220	0.50%	1/10W
R9257	1-216-061-00	RES,CHIP	3.3K	5%	1/10W
R9258	1-216-061-00	RES,CHIP	3.3K	5%	1/10W
R9259	1-216-061-00	RES,CHIP	3.3K	5%	1/10W
R9260	1-216-061-00	RES,CHIP	3.3K	5%	1/10W
R9261	1-216-061-00	RES,CHIP	3.3K	5%	1/10W
R9262	1-216-061-00	RES,CHIP	3.3K	5%	1/10W
R9263	1-216-061-00	RES,CHIP	3.3K	5%	1/10W
R9264	1-216-061-00	RES,CHIP	3.3K	5%	1/10W
R9265	1-216-061-00	RES,CHIP	3.3K	5%	1/10W
R9266	1-216-061-00	RES,CHIP	3.3K	5%	1/10W
R9267	1-216-025-91	RES,CHIP	100	5%	1/10W
R9268	1-216-025-91	RES,CHIP	100	5%	1/10W
R9269	1-216-025-91	RES,CHIP	100	5%	1/10W
R9270	1-216-045-00	RES,CHIP	680	5%	1/10W
R9271	1-216-635-11	METAL CHIP	220	0.50%	1/10W
R9272	1-216-049-91	RES,CHIP	1K	5%	1/10W
R9273	1-216-049-91	RES,CHIP	1K	5%	1/10W
R9274	1-216-635-11	METAL CHIP	220	0.50%	1/10W
R9275	1-216-635-11	METAL CHIP	220	0.50%	1/10W
R9276	1-216-659-11	METAL CHIP	2.2K	0.50%	1/10W
R9277	1-216-659-11	METAL CHIP	2.2K	0.50%	1/10W
R9278	1-216-659-11	METAL CHIP	2.2K	0.50%	1/10W
R9279	1-216-049-91	RES,CHIP	1K	5%	1/10W
R9280	1-216-049-91	RES,CHIP	1K	5%	1/10W
R9281	1-216-049-91	RES,CHIP	1K	5%	1/10W
R9283	1-216-295-91	SHORT	0		
R9284	1-216-295-91	SHORT	0		
R9285	1-216-295-91	SHORT	0		
R9286	1-216-295-91	SHORT	0		
R9287	1-216-017-91	RES,CHIP	47	5%	1/10W
R9301	1-216-013-00	RES,CHIP	33	5%	1/10W
R9302	1-216-013-00	RES,CHIP	33	5%	1/10W
R9303	1-216-013-00	RES,CHIP	33	5%	1/10W
R9304	1-216-013-00	RES,CHIP	33	5%	1/10W
R9305	1-216-013-00	RES,CHIP	33	5%	1/10W
R9306	1-216-013-00	RES,CHIP	33	5%	1/10W
R9307	1-216-013-00	RES,CHIP	33	5%	1/10W
R9308	1-216-073-00	RES,CHIP	10K	5%	1/10W
R9309	1-216-073-00	RES,CHIP	10K	5%	1/10W
R9310	1-216-073-00	RES,CHIP	10K	5%	1/10W
R9311	1-216-073-00	RES,CHIP	10K	5%	1/10W
R9312	1-216-073-00	RES,CHIP	10K	5%	1/10W
R9313	1-216-073-00	RES,CHIP	10K	5%	1/10W
R9314	1-216-073-00	RES,CHIP	10K	5%	1/10W
R9315	1-216-073-00	RES,CHIP	10K	5%	1/10W
R9316	1-216-073-00	RES,CHIP	10K	5%	1/10W
R9317	1-216-073-00	RES,CHIP	10K	5%	1/10W
R9321	1-216-121-91	RES,CHIP	1M	5%	1/10W
R9322	1-216-073-00	RES,CHIP	10K	5%	1/10W
R9323	1-216-073-00	RES,CHIP	10K	5%	1/10W
R9324	1-216-073-00	RES,CHIP	10K	5%	1/10W
R9325	1-216-073-00	RES,CHIP	10K	5%	1/10W
R9326	1-216-073-00	RES,CHIP	10K	5%	1/10W
R9327	1-216-073-00	RES,CHIP	10K	5%	1/10W
R9328	1-216-073-00	RES,CHIP	10K	5%	1/10W
R9329	1-216-025-91	RES,CHIP	100	5%	1/10W
R9331	1-216-025-91	RES,CHIP	100	5%	1/10W
R9333	1-216-089-91	RES,CHIP	47K	5%	1/10W
R9334	1-216-025-91	RES,CHIP	100	5%	1/10W
R9339	1-216-673-11	METAL CHIP	8.2K	0.50%	1/10W
R9340	1-216-073-00	RES,CHIP	10K	5%	1/10W
R9341	1-216-073-00	RES,CHIP	10K	5%	1/10W
R9342	1-216-073-00	RES,CHIP	10K	5%	1/10W
R9343	1-216-073-00	RES,CHIP	10K	5%	1/10W
R9347	1-216-691-11	METAL CHIP	47K	0.50%	1/10W
R9401	1-216-049-91	RES,CHIP	1K	5%	1/10W
R9402	1-216-025-91	RES,CHIP	100	5%	1/10W
R9403	1-216-025-91	RES,CHIP	100	5%	1/10W
R9501	1-216-083-00	RES,CHIP	27K	5%	1/10W
R9502	1-216-089-91	RES,CHIP	47K	5%	1/10W
R9503	1-216-017-91	RES,CHIP	47	5%	1/10W
R9504	1-216-025-91	RES,CHIP	100	5%	1/10W
R9505	1-216-025-91	RES,CHIP	100	5%	1/10W
R9506	1-216-133-00	RES,CHIP	3.3M	5%	1/10W
R9508	1-216-295-91	SHORT	0		
R9510	1-216-295-91	SHORT	0		
R9511	1-216-017-91	RES,CHIP	47	5%	1/10W
R9512	1-216-017-91	RES,CHIP	47	5%	1/10W
R9513	1-216-037-91	RES,CHIP	330	5%	1/10W
R9515	1-216-037-91	RES,CHIP	330	5%	1/10W
R9517	1-216-037-91	RES,CHIP	330	5%	1/10W
R9519	1-216-017-91	RES,CHIP	47	5%	1/10W

Ref.No.	Part No.	Description			Remark
R9520	1-216-017-91	RES,CHIP	47	5%	1/10W
R9521	1-216-017-91	RES,CHIP	47	5%	1/10W
R9522	1-216-017-91	RES,CHIP	47	5%	1/10W
R9523	1-216-683-11	METAL CHIP	22K	0.50%	1/10W
R9524	1-216-069-00	RES,CHIP	6.8K	5%	1/10W
R9525	1-216-089-91	RES,CHIP	47K	5%	1/10W
R9526	1-216-017-91	RES,CHIP	47	5%	1/10W
R9527	1-216-017-91	RES,CHIP	47	5%	1/10W
R9528	1-216-017-91	RES,CHIP	47	5%	1/10W
R9529	1-216-077-91	RES,CHIP	15K	5%	1/10W
R9530	1-216-017-91	RES,CHIP	47	5%	1/10W
R9531	1-216-081-00	RES,CHIP	22K	5%	1/10W
R9532	1-216-037-00	RES,CHIP	330	5%	1/10W
R9535	1-216-691-11	METAL CHIP	47K	0.50%	1/10W
R9536	1-216-089-91	RES,CHIP	47K	5%	1/10W
R9537	1-216-295-91	SHORT	0		
R9538	1-216-085-00	RES,CHIP	33K	5%	1/10W
R9539	1-216-037-00	RES,CHIP	330	5%	1/10W
R9540	1-216-017-91	RES,CHIP	47	5%	1/10W
R9545	1-216-017-91	RES,CHIP	47	5%	1/10W
R9546	1-216-017-91	RES,CHIP	47	5%	1/10W
R9547	1-216-017-91	RES,CHIP	47	5%	1/10W
R9551	1-216-089-91	RES,CHIP	47K	5%	1/10W
R9552	1-216-081-00	RES,CHIP	22K	5%	1/10W
R9553	1-216-037-00	RES,CHIP	330	5%	1/10W
R9554	1-216-017-91	RES,CHIP	47	5%	1/10W
R9555	1-216-017-91	RES,CHIP	47	5%	1/10W
R9556	1-216-017-91	RES,CHIP	47	5%	1/10W
R9557	1-216-669-11	METAL CHIP	5.6K	0.50%	1/10W
R9558	1-216-667-11	METAL CHIP	4.7K	0.50%	1/10W

<CRYSTAL>

Ref.No.	Part No.	Description
X1201	1-767-606-11	VIBRATOR, CRYSTAL (20MHz) (AT51)
X1401	1-760-191-11	VIBRATOR, CRYSTAL (3.579545MHz)
X1402	1-760-191-11	VIBRATOR, CRYSTAL (4.433618MHz)
X1403	1-579-973-11	VIBRATOR, CRYSTAL (3.57561MHz) (PAL-M)
X1901	1-760-273-11	VIBRATOR, CRYSTAL (20MHz)

****

* A-1136-033-A BB COMPL

****

Ref.No.	Part No.	Description
	3-179-084-01	LEVER (R), PC BOARD
	3-179-085-01	LEVER (L), PC BOARD
	* 4-068-822-01	SHEET, FILTER

<CAPACITOR>

Ref.No.	Part No.	Description			Remark
C3001	1-128-401-11	ELECT CHIP	100MF	20%	25V
C3002	1-128-393-11	ELECT CHIP	100MF	20%	10V
C3003	1-128-393-11	ELECT CHIP	100MF	20%	10V
C3004	1-128-401-11	ELECT CHIP	100MF	20%	25V
C3005	1-128-393-11	ELECT CHIP	100MF	20%	10V
C3006	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C3007	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C3008	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C3009	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C3010	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C3011	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C3012	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C3013	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C3014	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C3015	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C3016	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C3017	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C3018	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C3019	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C3020	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C3021	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C3022	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C3023	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C3024	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C3025	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C3026	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C3027	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C3028	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C3029	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C3030	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C3031	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C3032	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C3033	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C3034	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C3101	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C3102	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C3103	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C3104	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C3105	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C3106	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C3107	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C3108	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C3109	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C3110	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C3111	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C3112	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C3113	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C3114	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C3115	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C3116	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C3117	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C3118	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C3119	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C3120	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C3121	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C3122	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C3123	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C3124	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C3125	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C3126	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C3127	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C3128	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C3129	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C3130	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C3131	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C3132	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C3221	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C3222	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C3223	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C3224	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C3225	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C3226	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C3227	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C3301	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C3302	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C3303	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C3304	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C3305	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C3306	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C3307	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C3308	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V

Ref.No.	Part No.	Description	Remark
C3309	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C3310	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C3311	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C3312	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C3313	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C3314	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C3315	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C3316	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C3317	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C3318	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C3319	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C3320	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C3321	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C3322	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C3401	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C3402	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C3403	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C3404	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C3405	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C3406	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C3407	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C3408	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C3409	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C3410	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C3411	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C3412	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C3413	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C3414	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C3415	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C3416	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C3417	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C3418	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C3419	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C3420	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C3421	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C3422	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C3501	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C3502	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C3503	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C3504	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C3505	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C3506	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C3507	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C3508	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C3509	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C3510	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C3511	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C3512	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C3513	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C3514	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C3515	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C3516	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C3517	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C3518	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C3519	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C3520	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C3521	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C3522	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C3601	1-163-021-91	CERAMIC CHIP 0.01MF 10% 50V	
C3602	1-163-121-00	CERAMIC CHIP 150PF 5% 50V	
C3603	1-126-395-11	ELECT CHIP 22MF 20% 16V	
C3604	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C3605	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C3607	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C3608	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C3609	1-163-021-91	CERAMIC CHIP 0.01MF 10% 50V	
C3610	1-163-121-00	CERAMIC CHIP 150PF 5% 50V	
C3611	1-126-395-11	ELECT CHIP 22MF 20% 16V	
C3612	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C3613	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C3614	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C3615	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C3616	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C3617	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C3618	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C3619	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C3620	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C3621	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C3622	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C3623	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C3624	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C3625	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C3627	1-128-393-11	ELECT CHIP 100MF 20% 10V	
C3628	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C3629	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C3630	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C3631	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C3632	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C3633	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C3634	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C3635	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C3636	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C3637	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C3638	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C3801	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C3802	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C3803	1-163-251-11	CERAMIC CHIP 100PF 5% 50V	
C3804	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C3805	1-163-251-11	CERAMIC CHIP 100PF 5% 50V	
C3806	1-163-251-11	CERAMIC CHIP 100PF 5% 50V	
C3807	1-163-251-11	CERAMIC CHIP 100PF 5% 50V	
C3808	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C3809	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C3810	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C3811	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C3812	1-163-251-11	CERAMIC CHIP 100PF 5% 50V	
C3813	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C3814	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C3815	1-163-251-11	CERAMIC CHIP 100PF 5% 50V	
C3816	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C3817	1-163-251-11	CERAMIC CHIP 100PF 5% 50V	
C3818	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C3819	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C3820	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C3821	1-163-251-11	CERAMIC CHIP 100PF 5% 50V	
C3822	1-126-206-11	ELECT CHIP 100MF 20% 6.3V	
C3823	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C3824	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C3825	1-126-206-11	ELECT CHIP 100MF 20% 6.3V	
C3826	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C3827	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C3828	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C3829	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C3830	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C3831	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C3832	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C3833	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C3834	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C3835	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C3836	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	

Ref.No.	Part No.	Description			Remark
C3837	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C3838	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C3851	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C3852	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C3853	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C3854	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C3855	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C3856	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C3857	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C3858	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C3859	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C3860	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C3861	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C3862	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C3863	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C3864	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C3865	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C3866	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C3867	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C3868	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C3869	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C3870	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C3871	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C3872	1-126-206-11	ELECT CHIP	100MF	20%	6.3V
C3873	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C3874	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C3875	1-126-206-11	ELECT CHIP	100MF	20%	6.3V
C3876	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C3877	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C3878	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C3879	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C3880	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C3881	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C3882	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C3883	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C3884	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C3885	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C3886	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C3887	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C3888	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C3901	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C3902	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C3903	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C3904	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C3905	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C3906	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C3907	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C3908	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C3909	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C3910	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C3911	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C3912	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C3913	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C3914	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C3915	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C3916	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C3917	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C3918	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C3919	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C3920	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C3921	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C3922	1-163-021-91	CERAMIC CHIP	0.01MF	10%	50V
C3923	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C3924	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C3925	1-126-206-11	ELECT CHIP	100MF	20%	6.3V
C3926	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C3927	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C3928	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C3929	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C3930	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C3931	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C3932	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C3933	1-126-206-11	ELECT CHIP	100MF	20%	6.3V
C3934	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C3935	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C3936	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C3937	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C3938	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C3939	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C3940	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C3941	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C3942	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C3943	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C3944	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C3945	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C3946	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C3947	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V

<CONNECTOR>

Ref.No.	Part No.	Description	Remark
CN3201	* 1-691-551-11	PIN, CONNECTOR (SMD) 8P	
CN3602	* 1-770-837-11	CONNECTOR, BOARD TO BOARD 30P	

<FERRITE BEAD>

Ref.No.	Part No.	Description		Remark
FB3801	1-469-365-21	FERRITE	0μH	
FB3802	1-469-365-21	FERRITE	0μH	
FB3851	1-469-365-21	FERRITE	0μH	
FB3852	1-469-365-21	FERRITE	0μH	
FB3901	1-469-365-21	FERRITE	0μH	
FB3902	1-469-365-21	FERRITE	0μH	
FB3903	1-469-365-21	FERRITE	0μH	

<FILTER>

Ref.No.	Part No.	Description	Remark
FL3001	1-239-466-21	FILTER, EMI	
FL3002	1-239-400-11	FILTER, CHIP EMI	
FL3003	1-239-400-11	FILTER, CHIP EMI	
FL3004	1-239-466-21	FILTER, EMI	
FL3005	1-239-466-21	FILTER, EMI	
FL3006	1-239-466-21	FILTER, EMI	
FL3007	1-239-466-21	FILTER, EMI	
FL3008	1-239-400-11	FILTER, CHIP EMI	
FL3016	1-239-466-21	FILTER, EMI	
FL3025	1-239-466-21	FILTER, EMI	
FL3026	1-239-466-21	FILTER, EMI	
FL3027	1-239-466-21	FILTER, EMI	

<IC>

Ref.No.	Part No.	Description	Remark
IC3001	8-759-456-26	IC 74LCX541MTCX	
IC3002	8-759-456-26	IC 74LCX541MTCX	
IC3003	8-759-386-26	IC 74LCX574MTCX	
IC3004	8-759-386-26	IC 74LCX574MTCX	
IC3005	8-759-012-13	IC MC10H125M	
IC3006	8-759-012-00	IC MC10H116M	
IC3007	8-759-563-32	IC CXG8007TQ	
IC3008	8-759-389-26	IC 74LCX08MTCX	
IC3009	8-759-389-26	IC 74LCX08MTCX	
IC3010	8-759-386-26	IC 74LCX574MTCX	
IC3011	8-759-386-26	IC 74LCX574MTCX	
IC3012	8-759-490-41	IC TC74VHCT541AFT(EL)	

Ref.No.	Part No.	Description	Remark
IC3101	8-759-563-32	IC CXG8007TQ	
IC3102	8-759-563-32	IC CXG8007TQ	
IC3201	8-759-563-33	IC CXD8774R	
IC3202	8-759-587-05	IC ISPLSI1016E-80LT44-BB02V2	
IC3203	8-759-456-26	IC 74LCX541MTCX	
IC3204	8-759-456-26	IC 74LCX541MTCX	
IC3301	8-759-559-51	IC IP90C63	
IC3302	8-759-585-35	IC EM636327TQ-8	
IC3303	8-759-559-51	IC IP90C63	
IC3304	8-759-585-35	IC EM636327TQ-8	
IC3305	8-759-466-57	IC 74LCX157MTCX	
IC3306	8-759-466-57	IC 74LCX157MTCX	
IC3307	8-759-466-57	IC 74LCX157MTCX	
IC3308	8-759-466-57	IC 74LCX157MTCX	
IC3309	8-759-386-26	IC 74LCX574MTCX	
IC3310	8-759-386-26	IC 74LCX574MTCX	
IC3401	8-759-559-51	IC IP90C63	
IC3402	8-759-585-35	IC EM636327TQ-8	
IC3403	8-759-559-51	IC IP90C63	
IC3404	8-759-585-35	IC EM636327TQ-8	
IC3405	8-759-466-57	IC 74LCX157MTCX	
IC3406	8-759-466-57	IC 74LCX157MTCX	
IC3407	8-759-466-57	IC 74LCX157MTCX	
IC3408	8-759-466-57	IC 74LCX157MTCX	
IC3409	8-759-386-26	IC 74LCX574MTCX	
IC3410	8-759-386-26	IC 74LCX574MTCX	
IC3501	8-759-559-51	IC IP90C63	
IC3502	8-759-585-35	IC EM636327TQ-8	
IC3503	8-759-559-51	IC IP90C63	
IC3504	8-759-585-35	IC EM636327TQ-8	
IC3505	8-759-466-57	IC 74LCX157MTCX	
IC3506	8-759-466-57	IC 74LCX157MTCX	
IC3507	8-759-466-57	IC 74LCX157MTCX	
IC3508	8-759-466-57	IC 74LCX157MTCX	
IC3509	8-759-386-26	IC 74LCX574MTCX	
IC3510	8-759-386-26	IC 74LCX574MTCX	
IC3601	8-759-473-33	IC IMISM530AYB-D	
IC3602	8-759-639-12	IC ISPLSI1016E-125LT44-BB03V1	
IC3603	8-759-639-17	IC 74LVT244MTCX	
IC3604	8-759-473-33	IC IMISM530AYB-D	
IC3605	8-759-456-26	IC 74LCX541MTCX	
IC3606	8-759-456-26	IC 74LCX541MTCX	
IC3607	8-759-639-16	IC GMZ3CH2	
IC3608	8-759-456-26	IC 74LCX541MTCX	
IC3609	8-759-456-26	IC 74LCX541MTCX	
IC3610	8-759-456-26	IC 74LCX541MTCX	
IC3611	8-759-477-70	IC MC10H351MEL	
IC3612	8-759-456-26	IC 74LCX541MTCX	
IC3613	8-759-466-55	IC 74LCX74MTCX	
IC3614	8-759-466-55	IC 74LCX74MTCX	
IC3801	8-759-544-02	IC CXD8760FQ	
IC3802	8-759-639-14	IC ISPGDX80A-7T100-BB04V1	
IC3803	8-759-639-08	IC HI5728IN	
IC3851	8-759-544-02	IC CXD8760FQ	
IC3852	8-759-639-14	IC ISPGDX80A-7T100-BB04V1	
IC3853	8-759-639-08	IC HI5728IN	
IC3901	8-759-544-02	IC CXD8760FQ	
IC3902	8-759-544-01	IC S-80828ANNP-EDR-T2	
IC3903	8-759-389-30	IC 74LCX32MTCX	
IC3904	8-759-475-44	IC TC74LCX138FT(EL)	
IC3905	8-759-645-77	IC MBM29LV002T-SRION	
IC3906	8-759-639-14	IC ISPGDX80A-7T100-BB04V1	
IC3907	8-759-639-08	IC HI5728IN	

Ref.No.	Part No.	Description			Remark
	<RESISTOR>				
R3001	1-216-025-91	RES,CHIP	100	5%	1/10W
R3002	1-216-025-91	RES,CHIP	100	5%	1/10W
R3003	1-216-025-91	RES,CHIP	100	5%	1/10W
R3004	1-216-295-91	SHORT	0		
R3005	1-216-025-91	RES,CHIP	100	5%	1/10W
R3006	1-216-019-00	RES,CHIP	56	5%	1/10W
R3007	1-216-019-00	RES,CHIP	56	5%	1/10W
R3008	1-216-019-00	RES,CHIP	56	5%	1/10W
R3009	1-216-019-00	RES,CHIP	56	5%	1/10W
R3010	1-216-025-91	RES,CHIP	100	5%	1/10W
R3011	1-216-025-91	RES,CHIP	100	5%	1/10W
R3012	1-216-025-91	RES,CHIP	100	5%	1/10W
R3013	1-216-025-91	RES,CHIP	100	5%	1/10W
R3014	1-216-025-91	RES,CHIP	100	5%	1/10W
R3015	1-216-025-91	RES,CHIP	100	5%	1/10W
R3016	1-216-025-91	RES,CHIP	100	5%	1/10W
R3017	1-216-025-91	RES,CHIP	100	5%	1/10W
R3020	1-216-009-91	RES,CHIP	22	5%	1/10W
R3022	1-216-009-91	RES,CHIP	22	5%	1/10W
R3023	1-216-009-91	RES,CHIP	22	5%	1/10W
R3101	1-216-025-91	RES,CHIP	100	5%	1/10W
R3102	1-216-025-91	RES,CHIP	100	5%	1/10W
R3103	1-216-025-91	RES,CHIP	100	5%	1/10W
R3104	1-216-025-91	RES,CHIP	100	5%	1/10W
R3105	1-216-025-91	RES,CHIP	100	5%	1/10W
R3106	1-216-025-91	RES,CHIP	100	5%	1/10W
R3107	1-216-025-91	RES,CHIP	100	5%	1/10W
R3108	1-216-025-91	RES,CHIP	100	5%	1/10W
R3111	1-216-009-91	RES,CHIP	22	5%	1/10W
R3113	1-216-009-91	RES,CHIP	22	5%	1/10W
R3114	1-216-025-91	RES,CHIP	100	5%	1/10W
R3115	1-216-025-91	RES,CHIP	100	5%	1/10W
R3116	1-216-025-91	RES,CHIP	100	5%	1/10W
R3117	1-216-025-91	RES,CHIP	100	5%	1/10W
R3118	1-216-025-91	RES,CHIP	100	5%	1/10W
R3119	1-216-025-91	RES,CHIP	100	5%	1/10W
R3120	1-216-025-91	RES,CHIP	100	5%	1/10W
R3121	1-216-025-91	RES,CHIP	100	5%	1/10W
R3122	1-216-009-91	RES,CHIP	22	5%	1/10W
R3124	1-216-009-91	RES,CHIP	22	5%	1/10W
R3127	1-216-009-91	RES,CHIP	22	5%	1/10W
R3217	1-216-049-91	RES,CHIP	1K	5%	1/10W
R3218	1-216-049-91	RES,CHIP	1K	5%	1/10W
R3221	1-216-049-91	RES,CHIP	1K	5%	1/10W
R3224	1-216-049-91	RES,CHIP	1K	5%	1/10W
R3226	1-216-049-91	RES,CHIP	1K	5%	1/10W
R3229	1-216-049-91	RES,CHIP	1K	5%	1/10W
R3232	1-216-073-00	RES,CHIP	10K	5%	1/10W
R3233	1-216-073-00	RES,CHIP	10K	5%	1/10W
R3234	1-216-009-91	RES,CHIP	22	5%	1/10W
R3235	1-216-073-00	RES,CHIP	10K	5%	1/10W
R3236	1-216-073-00	RES,CHIP	10K	5%	1/10W
R3238	1-216-073-00	RES,CHIP	10K	5%	1/10W
R3239	1-216-073-00	RES,CHIP	10K	5%	1/10W
R3240	1-216-073-00	RES,CHIP	10K	5%	1/10W
R3241	1-216-073-00	RES,CHIP	10K	5%	1/10W
R3247	1-216-073-00	RES,CHIP	10K	5%	1/10W
R3248	1-216-073-00	RES,CHIP	10K	5%	1/10W
R3249	1-216-073-00	RES,CHIP	10K	5%	1/10W
R3250	1-216-049-91	RES,CHIP	1K	5%	1/10W
R3254	1-216-295-91	SHORT	0		
R3255	1-216-009-91	RES,CHIP	22	5%	1/10W
R3256	1-216-009-91	RES,CHIP	22	5%	1/10W
R3257	1-216-009-91	RES,CHIP	22	5%	1/10W
R3258	1-216-049-91	RES,CHIP	1K	5%	1/10W

BB

Ref.No.	Part No.	Description			Remark
R3267	1-216-049-91	RES,CHIP	1K	5%	1/10W
R3276	1-216-009-91	RES,CHIP	22	5%	1/10W
R3277	1-216-049-91	RES,CHIP	1K	5%	1/10W
R3282	1-216-009-91	RES,CHIP	22	5%	1/10W
R3283	1-216-009-91	RES,CHIP	22	5%	1/10W
R3303	1-216-295-91	SHORT	0		
R3306	1-216-295-91	SHORT	0		
R3403	1-216-295-91	SHORT	0		
R3406	1-216-295-91	SHORT	0		
R3503	1-216-295-91	SHORT	0		
R3506	1-216-295-91	SHORT	0		
R3601	1-216-063-91	RES,CHIP	3.9K	5%	1/10W
R3602	1-216-295-91	SHORT	0		
R3603	1-216-295-91	SHORT	0		
R3604	1-216-295-91	SHORT	0		
R3605	1-216-295-91	SHORT	0		
R3606	1-216-295-91	SHORT	0		
R3607	1-216-001-00	RES,CHIP	10	5%	1/10W
R3608	1-216-009-91	RES,CHIP	22	5%	1/10W
R3609	1-216-049-91	RES,CHIP	1K	5%	1/10W
R3610	1-216-049-91	RES,CHIP	1K	5%	1/10W
R3611	1-216-049-91	RES,CHIP	1K	5%	1/10W
R3612	1-216-295-91	SHORT	0		
R3613	1-216-009-91	RES,CHIP	22	5%	1/10W
R3614	1-216-009-91	RES,CHIP	22	5%	1/10W
R3615	1-216-009-91	RES,CHIP	22	5%	1/10W
R3616	1-216-049-91	RES,CHIP	1K	5%	1/10W
R3617	1-216-295-91	SHORT	0		
R3618	1-216-295-91	SHORT	0		
R3619	1-216-295-91	SHORT	0		
R3620	1-216-295-91	SHORT	0		
R3622	1-216-009-91	RES,CHIP	22	5%	1/10W
R3623	1-216-049-91	RES,CHIP	1K	5%	1/10W
R3624	1-216-009-91	RES,CHIP	22	5%	1/10W
R3625	1-216-049-91	RES,CHIP	1K	5%	1/10W
R3626	1-216-009-91	RES,CHIP	22	5%	1/10W
R3627	1-216-049-91	RES,CHIP	1K	5%	1/10W
R3628	1-216-009-91	RES,CHIP	22	5%	1/10W
R3629	1-216-049-91	RES,CHIP	1K	5%	1/10W
R3630	1-216-009-91	RES,CHIP	22	5%	1/10W
R3631	1-216-063-91	RES,CHIP	3.9K	5%	1/10W
R3633	1-216-009-91	RES,CHIP	22	5%	1/10W
R3634	1-216-049-91	RES,CHIP	1K	5%	1/10W
R3635	1-216-009-91	RES,CHIP	22	5%	1/10W
R3636	1-216-009-91	RES,CHIP	22	5%	1/10W
R3637	1-216-009-91	RES,CHIP	22	5%	1/10W
R3638	1-216-009-91	RES,CHIP	22	5%	1/10W
R3639	1-216-009-91	RES,CHIP	22	5%	1/10W
R3640	1-216-009-91	RES,CHIP	22	5%	1/10W
R3641	1-216-295-91	SHORT	0		
R3642	1-216-295-91	SHORT	0		
R3643	1-216-295-91	SHORT	0		
R3644	1-216-049-91	RES,CHIP	1K	5%	1/10W
R3645	1-216-009-91	RES,CHIP	22	5%	1/10W
R3646	1-216-295-91	SHORT	0		
R3647	1-216-295-91	SHORT	0		
R3648	1-216-001-00	RES,CHIP	10	5%	1/10W
R3649	1-216-009-91	RES,CHIP	22	5%	1/10W
R3650	1-216-049-91	RES,CHIP	1K	5%	1/10W
R3652	1-216-009-00	RES,CHIP	22	5%	1/10W
R3653	1-216-009-91	RES,CHIP	22	5%	1/10W
R3654	1-216-009-91	RES,CHIP	22	5%	1/10W
R3655	1-216-009-91	RES,CHIP	22	5%	1/10W
R3656	1-216-009-91	RES,CHIP	22	5%	1/10W
R3662	1-216-001-00	RES,CHIP	10	5%	1/10W
R3663	1-216-009-91	RES,CHIP	22	5%	1/10W

Ref.No.	Part No.	Description			Remark
R3664	1-216-009-91	RES,CHIP	22	5%	1/10W
R3665	1-216-295-91	SHORT	0		
R3666	1-216-295-91	SHORT	0		
R3667	1-216-295-91	SHORT	0		
R3668	1-216-295-91	SHORT	0		
R3670	1-216-009-91	RES,CHIP	22	5%	1/10W
R3671	1-216-295-91	SHORT	0		
R3672	1-216-049-91	RES,CHIP	1K	5%	1/10W
R3673	1-216-009-91	RES,CHIP	22	5%	1/10W
R3674	1-216-009-91	RES,CHIP	22	5%	1/10W
R3675	1-216-009-91	RES,CHIP	22	5%	1/10W
R3676	1-216-009-91	RES,CHIP	22	5%	1/10W
R3677	1-216-009-91	RES,CHIP	22	5%	1/10W
R3678	1-216-009-91	RES,CHIP	22	5%	1/10W
R3679	1-216-009-91	RES,CHIP	22	5%	1/10W
R3680	1-216-009-91	RES,CHIP	22	5%	1/10W
R3681	1-216-009-91	RES,CHIP	22	5%	1/10W
R3682	1-216-009-91	RES,CHIP	22	5%	1/10W
R3683	1-216-009-91	RES,CHIP	22	5%	1/10W
R3684	1-216-009-91	RES,CHIP	22	5%	1/10W
R3685	1-216-009-91	RES,CHIP	22	5%	1/10W
R3686	1-216-009-91	RES,CHIP	22	5%	1/10W
R3687	1-216-009-91	RES,CHIP	22	5%	1/10W
R3688	1-216-009-91	RES,CHIP	22	5%	1/10W
R3689	1-216-295-91	SHORT	0		
R3690	1-216-295-91	SHORT	0		
R3691	1-216-295-91	SHORT	0		
R3692	1-216-295-91	SHORT	0		
R3694	1-216-009-91	RES,CHIP	22	5%	1/10W
R3695	1-216-009-91	RES,CHIP	22	5%	1/10W
R3696	1-216-009-91	RES,CHIP	22	5%	1/10W
R3697	1-216-009-91	RES,CHIP	22	5%	1/10W
R3698	1-216-009-91	RES,CHIP	22	5%	1/10W
R3699	1-216-009-91	RES,CHIP	22	5%	1/10W
R3700	1-216-009-91	RES,CHIP	22	5%	1/10W
R3701	1-216-009-91	RES,CHIP	22	5%	1/10W
R3702	1-216-009-91	RES,CHIP	22	5%	1/10W
R3703	1-216-009-91	RES,CHIP	22	5%	1/10W
R3704	1-216-009-91	RES,CHIP	22	5%	1/10W
R3705	1-216-009-91	RES,CHIP	22	5%	1/10W
R3706	1-216-049-91	RES,CHIP	1K	5%	1/10W
R3707	1-216-295-91	SHORT	0		
R3708	1-216-009-91	RES,CHIP	22	5%	1/10W
R3709	1-216-009-91	RES,CHIP	22	5%	1/10W
R3710	1-216-009-91	RES,CHIP	22	5%	1/10W
R3711	1-216-009-91	RES,CHIP	22	5%	1/10W
R3712	1-216-009-91	RES,CHIP	22	5%	1/10W
R3713	1-216-009-91	RES,CHIP	22	5%	1/10W
R3714	1-216-009-91	RES,CHIP	22	5%	1/10W
R3715	1-216-009-91	RES,CHIP	22	5%	1/10W
R3716	1-216-009-91	RES,CHIP	22	5%	1/10W
R3717	1-216-009-91	RES,CHIP	22	5%	1/10W
R3718	1-216-009-91	RES,CHIP	22	5%	1/10W
R3719	1-216-009-91	RES,CHIP	22	5%	1/10W
R3720	1-216-009-91	RES,CHIP	22	5%	1/10W
R3721	1-216-009-91	RES,CHIP	22	5%	1/10W
R3722	1-216-009-91	RES,CHIP	22	5%	1/10W
R3723	1-216-009-91	RES,CHIP	22	5%	1/10W
R3724	1-216-009-91	RES,CHIP	22	5%	1/10W
R3725	1-216-009-91	RES,CHIP	22	5%	1/10W
R3726	1-216-009-91	RES,CHIP	22	5%	1/10W
R3727	1-216-049-91	RES,CHIP	1K	5%	1/10W
R3728	1-216-009-91	RES,CHIP	22	5%	1/10W
R3729	1-216-009-91	RES,CHIP	22	5%	1/10W
R3730	1-216-009-91	RES,CHIP	22	5%	1/10W
R3731	1-216-009-91	RES,CHIP	22	5%	1/10W

Ref.No.	Part No.	Description	Remark
R3732	1-216-009-91	RES,CHIP 22 5% 1/10W	
R3733	1-216-009-91	RES,CHIP 22 5% 1/10W	
R3734	1-216-009-91	RES,CHIP 22 5% 1/10W	
R3744	1-216-065-91	RES,CHIP 4.7K 5% 1/10W	
R3801	1-216-295-91	SHORT 0	
R3804	1-216-295-91	SHORT 0	
R3805	1-216-295-91	SHORT 0	
R3807	1-216-009-91	RES,CHIP 22 5% 1/10W	
R3808	1-216-295-91	SHORT 0	
R3810	1-216-295-91	SHORT 0	
R3811	1-216-295-91	SHORT 0	
R3813	1-216-295-91	SHORT 0	
R3815	1-216-009-91	RES,CHIP 22 5% 1/10W	
R3816	1-216-295-91	SHORT 0	
R3818	1-216-627-11	METAL CHIP 100 0.50% 1/10W	
R3819	1-216-627-11	METAL CHIP 100 0.50% 1/10W	
R3820	1-216-627-11	METAL CHIP 100 0.50% 1/10W	
R3821	1-216-627-11	METAL CHIP 100 0.50% 1/10W	
R3822	1-216-658-11	METAL CHIP 2K 0.50% 1/10W	
R3824	1-216-295-91	SHORT 0	
R3851	1-216-295-91	SHORT 0	
R3853	1-216-295-91	SHORT 0	
R3855	1-216-295-91	SHORT 0	
R3857	1-216-295-91	SHORT 0	
R3859	1-216-295-91	SHORT 0	
R3860	1-216-295-91	SHORT 0	
R3862	1-216-295-91	SHORT 0	
R3864	1-216-009-91	RES,CHIP 22 5% 1/10W	
R3865	1-216-295-91	SHORT 0	
R3867	1-216-627-11	METAL CHIP 100 0.50% 1/10W	
R3868	1-216-627-11	METAL CHIP 100 0.50% 1/10W	
R3869	1-216-627-11	METAL CHIP 100 0.50% 1/10W	
R3870	1-216-627-11	METAL CHIP 100 0.50% 1/10W	
R3871	1-216-658-11	METAL CHIP 2K 0.50% 1/10W	
R3873	1-216-295-91	SHORT 0	
R3901	1-216-295-91	SHORT 0	
R3902	1-216-295-91	SHORT 0	
R3903	1-216-295-91	SHORT 0	
R3905	1-216-009-91	RES,CHIP 22 5% 1/10W	
R3906	1-216-009-91	RES,CHIP 22 5% 1/10W	
R3907	1-216-009-91	RES,CHIP 22 5% 1/10W	
R3909	1-216-295-91	SHORT 0	
R3910	1-216-295-91	SHORT 0	
R3912	1-216-295-91	SHORT 0	
R3914	1-216-295-91	SHORT 0	
R3915	1-216-295-91	SHORT 0	
R3917	1-216-073-00	RES,CHIP 10K 5% 1/10W	
R3920	1-216-073-00	RES,CHIP 10K 5% 1/10W	
R3921	1-216-295-91	SHORT 0	
R3923	1-216-073-00	RES,CHIP 10K 5% 1/10W	
R3924	1-216-295-91	SHORT 0	
R3926	1-216-627-11	METAL CHIP 100 0.50% 1/10W	
R3927	1-216-627-11	METAL CHIP 100 0.50% 1/10W	
R3928	1-216-627-11	METAL CHIP 100 0.50% 1/10W	
R3929	1-216-627-11	METAL CHIP 100 0.50% 1/10W	
R3930	1-216-658-11	METAL CHIP 2K 0.50% 1/10W	
R3932	1-216-295-91	SHORT 0	

<NETWORK>

Ref.No.	Part No.	Description	Remark
RB3001	1-236-908-11	RES, CHIP NETWORK 10K (3216)	
RB3002	1-236-908-11	RES, CHIP NETWORK 10K (3216)	
RB3003	1-236-908-11	RES, CHIP NETWORK 10K (3216)	
RB3004	1-236-908-11	RES, CHIP NETWORK 10K (3216)	
RB3005	1-236-908-11	RES, CHIP NETWORK 10K (3216)	
RB3006	1-236-908-11	RES, CHIP NETWORK 10K (3216)	
RB3007	1-236-908-11	RES, CHIP NETWORK 10K (3216)	
RB3008	1-239-409-11	RES, CHIP NETWORK 47 (3216)	
RB3009	1-233-576-11	RES, CHIP NETWORK 100	
RB3010	1-233-576-11	RES, CHIP NETWORK 100	
RB3011	1-239-409-11	RES, CHIP NETWORK 47 (3216)	
RB3012	1-233-575-11	RES, CHIP NETWORK 22	
RB3013	1-233-575-11	RES, CHIP NETWORK 22	
RB3014	1-233-575-11	RES, CHIP NETWORK 22	
RB3015	1-233-575-11	RES, CHIP NETWORK 22	
RB3016	1-233-575-11	RES, CHIP NETWORK 22	
RB3017	1-233-575-11	RES, CHIP NETWORK 22	
RB3018	1-233-575-11	RES, CHIP NETWORK 22	
RB3019	1-233-575-11	RES, CHIP NETWORK 22	
RB3020	1-233-575-11	RES, CHIP NETWORK 22	
RB3021	1-233-575-11	RES, CHIP NETWORK 22	
RB3022	1-233-575-11	RES, CHIP NETWORK 22	
RB3023	1-233-575-11	RES, CHIP NETWORK 22	
RB3024	1-233-575-11	RES, CHIP NETWORK 22	
RB3025	1-233-575-11	RES, CHIP NETWORK 22	
RB3026	1-233-575-11	RES, CHIP NETWORK 22	
RB3027	1-233-575-11	RES, CHIP NETWORK 22	
RB3028	1-233-575-11	RES, CHIP NETWORK 22	
RB3029	1-233-575-11	RES, CHIP NETWORK 22	
RB3030	1-233-575-11	RES, CHIP NETWORK 22	
RB3031	1-233-575-11	RES, CHIP NETWORK 22	
RB3101	1-233-575-11	RES, CHIP NETWORK 22	
RB3102	1-233-575-11	RES, CHIP NETWORK 22	
RB3103	1-233-575-11	RES, CHIP NETWORK 22	
RB3104	1-233-575-11	RES, CHIP NETWORK 22	
RB3105	1-233-575-11	RES, CHIP NETWORK 22	
RB3106	1-233-575-11	RES, CHIP NETWORK 22	
RB3107	1-233-575-11	RES, CHIP NETWORK 22	
RB3108	1-233-575-11	RES, CHIP NETWORK 22	
RB3109	1-233-575-11	RES, CHIP NETWORK 22	
RB3110	1-233-575-11	RES, CHIP NETWORK 22	
RB3111	1-233-575-11	RES, CHIP NETWORK 22	
RB3112	1-233-575-11	RES, CHIP NETWORK 22	
RB3113	1-233-575-11	RES, CHIP NETWORK 22	
RB3114	1-233-575-11	RES, CHIP NETWORK 22	
RB3115	1-233-575-11	RES, CHIP NETWORK 22	
RB3116	1-233-575-11	RES, CHIP NETWORK 22	
RB3201	1-233-575-11	RES, CHIP NETWORK 22	
RB3202	1-233-575-11	RES, CHIP NETWORK 22	
RB3203	1-233-575-11	RES, CHIP NETWORK 22	
RB3205	1-233-575-11	RES, CHIP NETWORK 22	
RB3206	1-233-575-11	RES, CHIP NETWORK 22	
RB3301	1-233-575-11	RES, CHIP NETWORK 22	
RB3302	1-233-575-11	RES, CHIP NETWORK 22	
RB3303	1-233-575-11	RES, CHIP NETWORK 22	
RB3304	1-233-575-11	RES, CHIP NETWORK 22	
RB3401	1-233-575-11	RES, CHIP NETWORK 22	
RB3402	1-233-575-11	RES, CHIP NETWORK 22	
RB3403	1-233-575-11	RES, CHIP NETWORK 22	
RB3404	1-233-575-11	RES, CHIP NETWORK 22	
RB3501	1-233-575-11	RES, CHIP NETWORK 22	
RB3502	1-233-575-11	RES, CHIP NETWORK 22	
RB3503	1-233-575-11	RES, CHIP NETWORK 22	
RB3504	1-233-575-11	RES, CHIP NETWORK 22	
RB3801	1-233-575-11	RES, CHIP NETWORK 22	
RB3802	1-233-575-11	RES, CHIP NETWORK 22	
RB3803	1-236-976-91	NETWORK, RES 22	
RB3804	1-233-575-11	RES, CHIP NETWORK 22	
RB3805	1-233-575-11	RES, CHIP NETWORK 22	
RB3806	1-233-575-11	RES, CHIP NETWORK 22	
RB3807	1-233-575-11	RES, CHIP NETWORK 22	
RB3808	1-236-976-91	NETWORK, RES 22	

BB BC

Ref.No.	Part No.	Description	Remark
RB3809	1-233-575-11	RES, CHIP NETWORK 22	
RB3810	1-233-575-11	RES, CHIP NETWORK 22	
RB3811	1-233-575-11	RES, CHIP NETWORK 22	
RB3812	1-233-575-11	RES, CHIP NETWORK 22	
RB3813	1-236-976-91	NETWORK, RES 22	
RB3814	1-233-575-11	RES, CHIP NETWORK 22	
RB3815	1-233-575-11	RES, CHIP NETWORK 22	
RB3816	1-236-976-91	NETWORK, RES 22	
RB3851	1-233-575-11	RES, CHIP NETWORK 22	
RB3852	1-233-575-11	RES, CHIP NETWORK 22	
RB3853	1-236-976-91	NETWORK, RES 22	
RB3854	1-233-575-11	RES, CHIP NETWORK 22	
RB3855	1-233-575-11	RES, CHIP NETWORK 22	
RB3856	1-233-575-11	RES, CHIP NETWORK 22	
RB3857	1-233-575-11	RES, CHIP NETWORK 22	
RB3858	1-236-976-91	NETWORK, RES 22	
RB3859	1-233-575-11	RES, CHIP NETWORK 22	
RB3860	1-233-575-11	RES, CHIP NETWORK 22	
RB3861	1-233-575-11	RES, CHIP NETWORK 22	
RB3862	1-233-575-11	RES, CHIP NETWORK 22	
RB3863	1-236-976-91	NETWORK, RES 22	
RB3864	1-233-575-11	RES, CHIP NETWORK 22	
RB3865	1-233-575-11	RES, CHIP NETWORK 22	
RB3866	1-236-976-91	NETWORK, RES 22	
RB3901	1-236-971-11	NETWORK, RES 0	
RB3902	1-236-971-11	NETWORK, RES 0	
RB3903	1-236-971-11	NETWORK, RES 0	
RB3904	1-236-971-11	NETWORK, RES 0	
RB3905	1-236-971-11	NETWORK, RES 0	
RB3906	1-233-575-11	RES, CHIP NETWORK 22	
RB3907	1-233-575-11	RES, CHIP NETWORK 22	
RB3908	1-236-976-91	NETWORK, RES 22	
RB3909	1-233-575-11	RES, CHIP NETWORK 22	
RB3910	1-233-575-11	RES, CHIP NETWORK 22	
RB3911	1-233-575-11	RES, CHIP NETWORK 22	
RB3912	1-233-575-11	RES, CHIP NETWORK 22	
RB3913	1-236-976-91	NETWORK, RES 22	
RB3914	1-233-575-11	RES, CHIP NETWORK 22	
RB3915	1-233-575-11	RES, CHIP NETWORK 22	
RB3916	1-236-976-91	NETWORK, RES 22	
RB3917	1-233-575-11	RES, CHIP NETWORK 22	
RB3918	1-233-575-11	RES, CHIP NETWORK 22	
RB3919	1-233-575-11	RES, CHIP NETWORK 22	
RB3920	1-233-575-11	RES, CHIP NETWORK 22	
RB3921	1-233-575-11	RES, CHIP NETWORK 22	
RB3922	1-233-575-11	RES, CHIP NETWORK 22	
RB3923	1-236-908-11	RES, CHIP NETWORK 10K (3216)	
RB3924	1-236-908-11	RES, CHIP NETWORK 10K (3216)	
RB3925	1-233-575-11	RES, CHIP NETWORK 22	
RB3926	1-233-575-11	RES, CHIP NETWORK 22	
RB3927	1-233-575-11	RES, CHIP NETWORK 22	
RB3928	1-236-976-91	NETWORK, RES 22	
RB3929	1-233-575-11	RES, CHIP NETWORK 22	
RB3930	1-233-575-11	RES, CHIP NETWORK 22	
RB3931	1-236-976-91	NETWORK, RES 22	
	<CRYSTAL>		
X3601	1-781-232-21	OSCILLATOR, CRYSTAL (60MHz)	
X3602	1-781-628-21	OSCILLATOR, CRYSTAL (80MHz)	

Ref.No.	Part No.	Description	Remark
**			
	* A-1135-954-A	BC COMPL **********************	
	3-179-084-01	LEVER (R), PC BOARD	
	3-179-085-01	LEVER (L), PC BOARD	
	4-382-854-01	SCREW (M3X8), P, SW (+)	
	<CAPACITOR>		
C4004	1-126-933-11	ELECT 100MF 20% 16V	
C4006	1-164-004-11	CERAMIC CHIP0.1MF 10% 25V	
C4007	1-126-961-11	ELECT 2.2MF 20% 50V	
C4008	1-164-004-11	CERAMIC CHIP0.1MF 10% 25V	
C4009	1-164-004-11	CERAMIC CHIP0.1MF 10% 25V	
C4010	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C4011	1-164-161-11	CERAMIC CHIP 0.0022MF 10% 50V	
C4012	1-164-161-11	CERAMIC CHIP 0.0022MF 10% 50V	
C4013	1-126-965-11	ELECT 22MF 20% 50V	
C4014	1-104-665-11	ELECT 100MF 20% 25V	
C4017	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C4018	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C4019	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C4020	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C4021	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C4022	1-126-961-11	ELECT 2.2MF 20% 50V	
C4024	1-126-933-11	ELECT 100MF 20% 16V	
C4025	1-126-961-11	ELECT 2.2MF 20% 50V	
C4027	1-126-961-11	ELECT 2.2MF 20% 50V	
C4029	1-126-961-11	ELECT 2.2MF 20% 50V	
C4030	1-126-961-11	ELECT 2.2MF 20% 50V	
C4031	1-126-933-11	ELECT 100MF 20% 16V	
C4032	1-126-965-11	ELECT 22MF 20% 50V	
C4033	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C4034	1-126-965-11	ELECT 22MF 20% 50V	
C4035	1-126-933-11	ELECT 100MF 20% 16V	
C4037	1-104-665-11	ELECT 100MF 20% 25V	
C4038	1-104-665-11	ELECT 100MF 20% 25V	
C4040	1-104-665-11	ELECT 100MF 20% 25V	
C4041	1-126-961-11	ELECT 2.2MF 20% 50V	
C4042	1-126-963-11	ELECT 4.7MF 20% 50V	
C4046	1-104-665-11	ELECT 100MF 20% 25V	
C4047	1-126-963-11	ELECT 4.7MF 20% 50V	
C4048	1-126-961-11	ELECT 2.2MF 20% 50V	
C4049	1-126-967-11	ELECT 47MF 20% 50V	
C4050	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C4051	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C4052	1-126-971-11	ELECT 470MF 20% 50V	
C4053	1-126-971-11	ELECT 470MF 20% 50V	
C4054	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C4056	1-128-550-21	ELECT 2200MF 20% 50V	
C4057	1-126-960-11	ELECT 1MF 20% 50V	
C4058	1-126-960-11	ELECT 1MF 20% 50V	
C4301	1-104-665-11	ELECT 100MF 20% 25V	
C4302	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C4303	1-104-665-11	ELECT 100MF 20% 25V	
C4304	1-126-933-11	ELECT 100MF 20% 16V	
C4305	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C4306	1-126-933-11	ELECT 100MF 20% 16V	
C4307	1-126-933-11	ELECT 100MF 20% 16V	
C4308	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C4309	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C4310	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C4311	1-126-961-11	ELECT 2.2MF 20% 50V	
C4312	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C4313	1-126-961-11	ELECT 2.2MF 20% 50V	

Ref.No.	Part No.	Description			Remark
C4314	1-126-961-11	ELECT	2.2MF	20%	50V
C4315	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C4316	1-104-664-11	ELECT	47MF	20%	16V
C4317	1-104-664-11	ELECT	47MF	20%	16V
C4318	1-104-664-11	ELECT	47MF	20%	16V
C4319	1-126-964-11	ELECT	10MF	20%	50V
C4320	1-126-964-11	ELECT	10MF	20%	50V
C4321	1-126-964-11	ELECT	10MF	20%	50V
C4510	1-104-665-11	ELECT	100MF	20%	25V
C4511	1-104-665-11	ELECT	100MF	20%	25V
	<CONNECTOR>				
CN4001	* 1-778-393-11	PIN, PC CONNECTOR 96P			
CN4002	* 1-770-837-11	CONNECTOR, BOARD TO BOARD 30P			
CN4003	* 1-564-507-11	PLUG, CONNECTOR 4P			
	<DIODE>				
D4001	8-719-914-43	DIODE DAN202K			
D4002	8-719-914-43	DIODE DAN202K			
D4007	8-719-914-43	DIODE DAN202K			
D4010	8-719-914-43	DIODE DAN202K			
D4011	8-719-158-37	DIODE RD9.1SB2			
D4012	8-719-158-37	DIODE RD9.1SB2			
D4014	8-719-158-17	DIODE RD5.6SB2			
D4015	8-719-158-17	DIODE RD5.6SB2			
D4301	8-719-914-43	DIODE DAN202K			
D4302	8-719-158-17	DIODE RD5.6SB2			
D4303	8-719-158-17	DIODE RD5.6SB2			
D4304	8-719-158-17	DIODE RD5.6SB2			
D4305	8-719-158-17	DIODE RD5.6SB2			
D4306	8-719-158-17	DIODE RD5.6SB2			
D4307	8-719-158-17	DIODE RD5.6SB2			
D4308	8-719-988-61	DIODE 1SS355TE-17			
D4309	8-719-988-61	DIODE 1SS355TE-17			
D4310	8-719-988-61	DIODE 1SS355TE-17			
	<FILTER>				
FL4301	1-236-071-11	ENCAPSULATED COMPONENT			
FL4302	1-236-071-11	ENCAPSULATED COMPONENT			
	<IC>				
IC4002	8-759-273-12	IC TDA7315D013TR			
IC4003	8-759-701-59	IC NJM78M09FA			
IC4004	8-759-135-80	IC UPC358C			
IC4006	8-759-980-43	IC TDA2009A			
IC4301	8-759-286-17	IC PC74HC32D-T			
IC4302	8-759-286-17	IC PC74HC32D-T			
IC4303	8-759-286-17	IC PC74HC32D-T			
IC4304	8-759-285-69	IC PC74HC14D-T			
IC4305	8-759-285-55	IC PC74HC08D-T			
IC4306	8-759-633-10	IC M54544AL			
IC4307	8-759-633-10	IC M54544AL			
IC4308	8-759-633-10	IC M54544AL			
IC4309	8-759-394-35	IC BA12T			
	<COIL>				
L4001	1-412-363-21	FERRITE	0µH		
L4002	1-412-363-21	FERRITE	0µH		
L4301	1-412-533-21	INDUCTOR	47µH		
L4502	1-412-533-21	INDUCTOR	47µH		

Ref.No.	Part No.	Description			Remark
	<TRANSISTOR>				
Q4001	1-801-806-11	TRANSISTOR DTC144EKA-T146			
Q4002	8-729-027-38	TRANSISTOR DTA144EKA-T146			
Q4003	8-729-216-22	TRANSISTOR 2SA1162-G			
Q4005	8-729-216-22	TRANSISTOR 2SA1162-G			
Q4006	8-729-202-38	TRANSISTOR 2SC3326N-A			
Q4007	8-729-230-49	TRANSISTOR 2SC2712-YG			
Q4008	8-729-202-38	TRANSISTOR 2SC3326N-A			
Q4009	8-729-216-22	TRANSISTOR 2SA1162-G			
Q4010	8-729-202-38	TRANSISTOR 2SC3326N-A			
Q4011	8-729-202-38	TRANSISTOR 2SC3326N-A			
	<RESISTOR>				
R4001	1-216-025-91	RES,CHIP	100	5%	1/10W
R4002	1-216-025-91	RES,CHIP	100	5%	1/10W
R4003	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R4004	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R4005	1-216-067-00	RES,CHIP	5.6K	5%	1/10W
R4006	1-216-067-00	RES,CHIP	5.6K	5%	1/10W
R4007	1-216-097-91	RES,CHIP	100K	5%	1/10W
R4008	1-216-097-91	RES,CHIP	100K	5%	1/10W
R4009	1-216-097-91	RES,CHIP	100K	5%	1/10W
R4010	1-216-097-91	RES,CHIP	100K	5%	1/10W
R4011	1-216-295-91	SHORT	0		
R4012	1-216-295-91	SHORT	0		
R4015	1-216-025-91	RES,CHIP	100	5%	1/10W
R4016	1-216-025-91	RES,CHIP	100	5%	1/10W
R4018	1-216-063-91	RES,CHIP	3.9K	5%	1/10W
R4021	1-216-081-00	RES,CHIP	22K	5%	1/10W
R4022	1-216-061-00	RES,CHIP	3.3K	5%	1/10W
R4023	1-216-063-91	RES,CHIP	3.9K	5%	1/10W
R4024	1-216-061-00	RES,CHIP	3.3K	5%	1/10W
R4025	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R4027	1-216-049-91	RES,CHIP	1K	5%	1/10W
R4028	1-216-049-91	RES,CHIP	1K	5%	1/10W
R4029	1-216-049-91	RES,CHIP	1K	5%	1/10W
R4030	1-216-049-91	RES,CHIP	1K	5%	1/10W
R4033	1-216-049-91	RES,CHIP	1K	5%	1/10W
R4034	1-216-049-91	RES,CHIP	1K	5%	1/10W
R4035	1-216-081-00	RES,CHIP	22K	5%	1/10W
R4036	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R4038	1-216-051-00	RES,CHIP	1.2K	5%	1/10W
R4039	1-216-051-00	RES,CHIP	1.2K	5%	1/10W
R4040	1-216-073-00	RES,CHIP	10K	5%	1/10W
R4043	1-216-073-00	RES,CHIP	10K	5%	1/10W
R4044	1-216-073-00	RES,CHIP	10K	5%	1/10W
R4047	1-216-049-91	RES,CHIP	1K	5%	1/10W
R4050	1-216-061-00	RES,CHIP	3.3K	5%	1/10W
R4051	1-216-073-00	RES,CHIP	10K	5%	1/10W
R4052	1-216-075-00	RES,CHIP	12K	5%	1/10W
R4053	1-216-075-00	RES,CHIP	12K	5%	1/10W
R4054	1-216-049-91	RES,CHIP	1K	5%	1/10W
R4055	1-216-041-00	RES,CHIP	470	5%	1/10W
R4056	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R4057	1-216-015-00	RES,CHIP	39	5%	1/10W
R4058	1-216-015-00	RES,CHIP	39	5%	1/10W
R4059	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R4060	1-249-385-11	CARBON	2.2	5%	1/4W F
R4061	1-249-385-11	CARBON	2.2	5%	1/4W F
R4062	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R4063	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R4064	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R4065	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R4066	1-216-113-00	RES,CHIP	470K	5%	1/10W

BC **BM** **C**

Ref.No.	Part No.	Description				Remark
R4067	1-216-113-00	RES,CHIP	470K	5%	1/10W	
R4301	1-216-025-91	RES,CHIP	100	5%	1/10W	
R4302	1-216-025-91	RES,CHIP	100	5%	1/10W	
R4303	1-216-025-91	RES,CHIP	100	5%	1/10W	
R4304	1-216-025-91	RES,CHIP	100	5%	1/10W	
R4305	1-216-025-91	RES,CHIP	100	5%	1/10W	
R4306	1-216-025-91	RES,CHIP	100	5%	1/10W	
R4307	1-216-025-91	RES,CHIP	100	5%	1/10W	
R4308	1-216-025-91	RES,CHIP	100	5%	1/10W	
R4315	1-216-295-91	SHORT	0			
R4316	1-216-295-91	SHORT	0			
R4317	1-216-295-91	SHORT	0			
R4318	1-216-295-91	SHORT	0			
R4319	1-216-295-91	SHORT	0			
R4320	1-216-295-91	SHORT	0			
R4321	1-216-117-00	RES,CHIP	680K	5%	1/10W	
R4322	1-216-117-00	RES,CHIP	680K	5%	1/10W	
R4323	1-216-117-00	RES,CHIP	680K	5%	1/10W	
R4324	1-216-117-00	RES,CHIP	680K	5%	1/10W	
R4325	1-216-117-00	RES,CHIP	680K	5%	1/10W	
R4326	1-216-117-00	RES,CHIP	680K	5%	1/10W	
R4333	1-216-295-91	SHORT	0			
R4334	1-216-295-91	SHORT	0			
R4335	1-216-295-91	SHORT	0			
R4336	1-216-083-00	RES,CHIP	27K	5%	1/10W	
R4337	1-216-083-00	RES,CHIP	27K	5%	1/10W	
R4338	1-216-083-00	RES,CHIP	27K	5%	1/10W	
R4345	1-216-353-00	METAL OXIDE	2.2	5%	1W	F
R4346	1-216-353-00	METAL OXIDE	2.2	5%	1W	F
R4347	1-216-353-00	METAL OXIDE	2.2	5%	1W	F

<TEST PIN>

TP4001	*1-535-881-21	TERMINAL, TP (AUTO INSERTION)				
TP4002	*1-535-881-21	TERMINAL, TP (AUTO INSERTION)				
TP4003	*1-535-881-21	TERMINAL, TP (AUTO INSERTION)				
TP4004	*1-535-881-21	TERMINAL, TP (AUTO INSERTION)				
TP4005	*1-535-881-21	TERMINAL, TP (AUTO INSERTION)				

****

* A-1131-349-A BM NOUNT
****

<CAPACITOR>

C302	1-126-941-11	ELECT	470MF	20%	25V	
C304	1-126-941-11	ELECT	470MF	20%	25V	
C306	1-126-941-11	ELECT	470MF	20%	25V	
C307	1-126-941-11	ELECT	470MF	20%	25V	

<CONNECTOR>

CN304	*1-778-391-11	SOCKET, PC CONNECTOR 96P				
CN305	*1-778-393-11	PIN, PC CONNECTOR 96P				
CN307	*1-564-515-11	PLUG, CONNECTOR 12P				
CN308	*1-564-506-11	PLUG, CONNECTOR 3P				
CN310	*1-564-505-11	PLUG, CONNECTOR 2P				
CN311	*1-564-506-11	PLUG, CONNECTOR 3P				
CN312	*1-564-509-11	PLUG, CONNECTOR 6P				
CN313	*1-564-511-11	PLUG, CONNECTOR 8P				
CN314	*1-564-595-11	PLUG, CONNECTOR 14P				
CN315	*1-564-509-11	PLUG, CONNECTOR 6P				
CN316	*1-564-511-11	PLUG, CONNECTOR 8P				
CN317	*1-564-513-11	PLUG, CONNECTOR 10P				

Ref.No.	Part No.	Description				Remark

<JACK>

J301	1-568-547-11	JACK, MINIATUER PIN				
J302	1-568-547-11	JACK, MINIATUER PIN				
J303	1-568-547-11	JACK, MINIATUER PIN				

<COIL>

L301	1-412-533-21	INDUCTOR	47μH			
L302	1-412-533-21	INDUCTOR	47μH			
L303	1-412-533-21	INDUCTOR	47μH			

****

* A-1335-120-A C COMPL
****

<CAPACITOR>

C5003	1-128-401-11	ELECT CHIP	100MF	20%	25V	
C5004	1-128-401-11	ELECT CHIP	100MF	20%	25V	
C5005	1-128-401-11	ELECT CHIP	100MF	20%	25V	
C5006	1-128-401-11	ELECT CHIP	100MF	20%	25V	
C5007	1-164-005-11	CERAMIC CHIP	0.47MF		25V	
C5008	1-164-005-11	CERAMIC CHIP	0.47MF		25V	
C5009	1-164-005-11	CERAMIC CHIP	0.47MF		25V	
C5010	1-128-400-11	ELECT CHIP	47MF	20%	25V	
C5012	1-128-400-11	ELECT CHIP	47MF	20%	25V	
C5013	1-128-400-11	ELECT CHIP	47MF	20%	25V	
C5014	1-164-005-11	CERAMIC CHIP	0.47MF		25V	
C5015	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V	
C5016	1-128-401-11	ELECT CHIP	100MF	20%	25V	
C5017	1-163-021-91	CERAMIC CHIP	0.01MF	10%	50V	
C5019	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V	
C5020	1-128-401-11	ELECT CHIP	100MF	20%	25V	
C5021	1-127-532-11	ELECT	47MF	20%	20V	
C5023	1-164-005-11	CERAMIC CHIP	0.47MF		25V	
C5024	1-128-401-11	ELECT CHIP	100MF	20%	25V	
C5025	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V	
C5026	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V	
C5027	1-128-397-21	ELECT CHIP	100MF	20%	16V	
C5028	1-164-346-11	CERAMIC CHIP	1MF		16V	
C5031	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V	
C5032	1-164-182-11	CERAMIC CHIP	0.0033MF	10%	50V	
C5033	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V	
C5034	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V	
C5035	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V	
C5037	1-164-005-11	CERAMIC CHIP	0.47MF		25V	
C5038	1-128-397-21	ELECT CHIP	100MF	20%	16V	
C5039	1-113-578-11	ELECT	68MF	20%	10V	
C5040	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V	
C5041	1-124-779-00	ELECT CHIP	10MF	20%	16V	
C5042	1-164-005-11	CERAMIC CHIP	0.47MF		25V	
C5043	1-124-779-00	ELECT CHIP	10MF	20%	16V	
C5044	1-164-005-11	CERAMIC CHIP	0.47MF		25V	
C5045	1-164-005-11	CERAMIC CHIP	0.47MF		25V	
C5046	1-128-400-11	ELECT CHIP	47MF	20%	25V	
C5201	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V	
C5202	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V	
C5203	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V	
C5204	1-124-779-00	ELECT CHIP	10MF	20%	16V	
C5205	1-124-779-00	ELECT CHIP	10MF	20%	16V	
C5206	1-124-779-00	ELECT CHIP	10MF	20%	16V	
C5207	1-124-779-00	ELECT CHIP	10MF	20%	16V	
C5208	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V	

Ref.No.	Part No.	Description			Remark
C5209	1-124-779-00	ELECT CHIP	10MF	20%	16V
C5210	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C5211	1-124-779-00	ELECT CHIP	10MF	20%	16V
C5212	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C5213	1-128-400-11	ELECT CHIP	47MF	20%	25V
C5214	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C5215	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C5216	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C5217	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C5218	1-124-779-00	ELECT CHIP	10MF	20%	16V
C5221	1-109-994-11	CERAMIC CHIP	2.2MF	10%	10V
C5222	1-109-994-11	CERAMIC CHIP	2.2MF	10%	10V
C5223	1-109-994-11	CERAMIC CHIP	2.2MF	10%	10V
C5224	1-124-779-00	ELECT CHIP	10MF	20%	16V
C5225	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C5226	1-109-994-11	CERAMIC CHIP	2.2MF	10%	10V
C5227	1-109-994-11	CERAMIC CHIP	2.2MF	10%	10V
C5228	1-109-994-11	CERAMIC CHIP	2.2MF	10%	10V
C5229	1-124-779-00	ELECT CHIP	10MF	20%	16V
C5232	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C5233	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C5234	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C5235	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C5236	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C5237	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C5238	1-124-779-00	ELECT CHIP	10MF	20%	16V
C5401	1-128-401-11	ELECT CHIP	100MF	20%	25V
C5403	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C5404	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C5405	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C5406	1-128-397-21	ELECT CHIP	100MF	20%	16V
C5407	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C5408	1-128-397-21	ELECT CHIP	100MF	20%	16V
C5409	1-128-401-11	ELECT CHIP	100MF	20%	25V
C5410	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C5412	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C5414	1-128-397-21	ELECT CHIP	100MF	20%	16V
C5430	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C5432	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C5601	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C5604	1-126-204-11	ELECT CHIP	47MF	20%	16V
C5606	1-163-021-91	CERAMIC CHIP	0.01MF	10%	50V
C5612	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C5613	1-126-204-11	ELECT CHIP	47MF	20%	16V
C5617	1-126-204-11	ELECT CHIP	47MF	20%	16V
C5618	1-163-021-91	CERAMIC CHIP	0.01MF	10%	50V
C5620	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C5621	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C5623	1-128-400-11	ELECT CHIP	47MF	20%	25V
C5624	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C5625	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C5633	1-124-779-00	ELECT CHIP	10MF	20%	16V
C5634	1-124-779-00	ELECT CHIP	10MF	20%	16V
C5636	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C5637	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C5638	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C5639	1-163-021-91	CERAMIC CHIP	0.01MF	10%	50V
C5641	1-163-021-91	CERAMIC CHIP	0.01MF	10%	50V
C5642	1-126-206-11	ELECT CHIP	100MF	20%	6.3V
C5643	1-126-206-11	ELECT CHIP	100MF	20%	6.3V
C5644	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C5645	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C5646	1-126-200-11	ELECT CHIP	10MF	20%	35V
C5647	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C5648	1-126-200-11	ELECT CHIP	10MF	20%	35V
C5649	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C5650	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C5651	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C5656	1-126-200-11	ELECT CHIP	10MF	20%	35V
C5657	1-126-200-11	ELECT CHIP	10MF	20%	35V
C5658	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C5659	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C5660	1-126-200-11	ELECT CHIP	10MF	20%	35V
C5661	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C5662	1-117-681-11	ELECT CHIP	100MF	20%	16V
C5663	1-126-200-11	ELECT CHIP	10MF	20%	35V
C5664	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C5665	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C5666	1-126-200-11	ELECT CHIP	10MF	20%	35V
C5667	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C5668	1-124-779-00	ELECT CHIP	10MF	20%	16V
C5669	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C5670	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C5671	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C5801	1-124-779-00	ELECT CHIP	10MF	20%	16V
C5802	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C5803	1-124-779-00	ELECT CHIP	10MF	20%	16V
C5804	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C5805	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C5806	1-163-021-91	CERAMIC CHIP	0.01MF	10%	50V
C5807	1-163-021-91	CERAMIC CHIP	0.01MF	10%	50V
C5808	1-126-206-11	ELECT CHIP	100MF	20%	6.3V
C5809	1-126-206-11	ELECT CHIP	100MF	20%	6.3V
C5810	1-126-200-11	ELECT CHIP	10MF	20%	35V
C5811	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C5812	1-126-204-11	ELECT CHIP	47MF	20%	16V
C5813	1-126-200-11	ELECT CHIP	10MF	20%	35V
C5814	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C5815	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C5816	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C5819	1-126-200-11	ELECT CHIP	10MF	20%	35V
C5820	1-126-200-11	ELECT CHIP	10MF	20%	35V
C5821	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C5822	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C5823	1-126-200-11	ELECT CHIP	10MF	20%	35V
C5824	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C5825	1-117-681-11	ELECT CHIP	100MF	20%	16V
C5826	1-126-200-11	ELECT CHIP	10MF	20%	35V
C5827	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C5828	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C5829	1-126-200-11	ELECT CHIP	10MF	20%	35V
C5830	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C5831	1-124-779-00	ELECT CHIP	10MF	20%	16V
C5832	1-124-779-00	ELECT CHIP	10MF	20%	16V
C5833	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C5834	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C5835	1-163-021-91	CERAMIC CHIP	0.01MF	10%	50V
C5836	1-126-206-11	ELECT CHIP	100MF	20%	6.3V
C5837	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C5838	1-163-021-91	CERAMIC CHIP	0.01MF	10%	50V
C5839	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C5840	1-126-206-11	ELECT CHIP	100MF	20%	6.3V
C5841	1-126-204-11	ELECT CHIP	47MF	20%	16V
C5842	1-126-200-11	ELECT CHIP	10MF	20%	35V
C5843	1-126-200-11	ELECT CHIP	10MF	20%	35V
C5844	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C5845	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C5846	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C5849	1-126-200-11	ELECT CHIP	10MF	20%	35V
C5850	1-126-200-11	ELECT CHIP	10MF	20%	35V
C5851	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C5852	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V

C

Ref.No.	Part No.	Description	Remark
C5853	1-126-200-11	ELECT CHIP 10MF 20% 35V	
C5854	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C5855	1-117-681-11	ELECT CHIP 100MF 20% 16V	
C5856	1-126-200-11	ELECT CHIP 10MF 20% 35V	
C5857	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C5858	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C5859	1-126-200-11	ELECT CHIP 10MF 20% 35V	
C5860	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C5861	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C5863	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C5864	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
	<CONNECTOR>		
CN5001	*1-778-232-11	CONNECTOR, BOARD TO BOARD 30P	
CN5002	*1-778-232-11	CONNECTOR, BOARD TO BOARD 30P	
CN5003	*1-564-505-11	PLUG, CONNECTOR 2P	
CN5004	*1-564-509-11	PLUG, CONNECTOR 6P	
CN5005	*1-564-505-11	PLUG, CONNECTOR 2P	
CN5006	*1-564-505-11	PLUG, CONNECTOR 2P	
CN5007	*1-564-506-11	PLUG, CONNECTOR 3P	
CN5008	*1-564-506-11	PLUG, CONNECTOR 3P	
CN5009	*1-564-506-11	PLUG, CONNECTOR 3P	
CN5401	*1-691-551-11	PIN, CONNECTOR (SMD) 8P	
CN5601	*1-784-277-21	CONNECTOR, FFC/FPC 32P	
CN5801	*1-784-277-21	CONNECTOR, FFC/FPC 32P	
CN5802	*1-784-277-21	CONNECTOR, FFC/FPC 32P	
	<DIODE>		
D5001	8-719-158-17	DIODE RD5.6SB2	
D5002	8-719-055-30	DIODE D1FS4A-TA	
D5003	8-719-055-30	DIODE D1FS4A-TA	
D5004	8-719-914-43	DIODE DAN202K	
D5005	8-719-914-43	DIODE DAN202K	
D5006	8-719-914-43	DIODE DAN202K	
	<FERRITE BEAD>		
FB5401	1-414-760-21	INDUCTOR CHIP 0μH	
FB5601	1-414-227-11	INDUCTOR CHIP 0μH	
FB5604	1-414-760-21	INDUCTOR CHIP 0μH	
FB5605	1-414-760-21	INDUCTOR CHIP 0μH	
FB5606	1-414-760-21	INDUCTOR CHIP 0μH	
FB5608	1-414-760-21	INDUCTOR CHIP 0μH	
FB5609	1-414-760-21	INDUCTOR CHIP 0μH	
FB5610	1-414-760-21	INDUCTOR CHIP 0μH	
FB5611	1-414-760-21	INDUCTOR CHIP 0μH	
FB5801	1-414-227-11	INDUCTOR CHIP 0μH	
FB5804	1-414-760-21	INDUCTOR CHIP 0μH	
FB5805	1-414-760-21	INDUCTOR CHIP 0μH	
FB5806	1-414-760-21	INDUCTOR CHIP 0μH	
FB5808	1-414-760-21	INDUCTOR CHIP 0μH	
FB5809	1-414-760-21	INDUCTOR CHIP 0μH	
FB5810	1-414-760-21	INDUCTOR CHIP 0μH	
FB5811	1-414-760-21	INDUCTOR CHIP 0μH	
FB5812	1-414-227-11	INDUCTOR CHIP 0μH	
FB5815	1-414-760-21	INDUCTOR CHIP 0μH	
FB5816	1-414-760-21	INDUCTOR CHIP 0μH	
FB5817	1-414-760-21	INDUCTOR CHIP 0μH	
FB5819	1-414-760-21	INDUCTOR CHIP 0μH	
FB5820	1-414-760-21	INDUCTOR CHIP 0μH	
FB5821	1-414-760-21	INDUCTOR CHIP 0μH	
FB5822	1-414-760-21	INDUCTOR CHIP 0μH	

Ref.No.	Part No.	Description	Remark
	<FILTER>		
FL5001	1-239-466-21	FILTER, EMI	
FL5002	1-239-466-21	FILTER, EMI	
FL5003	1-239-466-21	FILTER, EMI	
FL5004	1-239-466-21	FILTER, EMI	
FL5005	1-239-466-21	FILTER, EMI	
	<IC>		
IC5001	8-759-157-17	IC PQ05SZ1U	
IC5002	8-759-388-31	IC PQ20VZ1U	
IC5003	8-759-259-77	IC PQ20VZ5U	
IC5004	8-759-491-36	IC TC74VHCT244AF(EL)	
IC5005	8-759-084-79	IC TC7S14F	
IC5007	8-759-637-94	IC LT1376IS8-TR	
IC5008	8-759-599-23	IC ADG736BRM-REEL	
IC5009	8-759-599-23	IC ADG736BRM-REEL	
IC5010	8-759-599-23	IC ADG736BRM-REEL	
IC5011	8-759-096-87	IC TC7WU04FU(TE12R)	
IC5012	8-759-259-77	IC PQ20VZ5U	
IC5013	8-759-157-17	IC PQ05SZ1U	
IC5201	8-759-599-25	IC MAX4117ESA-TG068	
IC5202	8-759-599-25	IC MAX4117ESA-TG068	
IC5203	8-759-599-25	IC MAX4117ESA-TG068	
IC5204	8-759-381-53	IC UPC814G2-E2	
IC5205	8-759-381-53	IC UPC814G2-E2	
IC5206	8-759-381-53	IC UPC814G2-E2	
IC5207	8-759-544-55	IC MAX4066CEE-TE2	
IC5208	8-759-530-57	IC TLV431ACDBV2	
IC5209	8-759-381-53	IC UPC814G2-E2	
IC5210	8-759-381-53	IC UPC814G2-E2	
IC5211	8-759-381-53	IC UPC814G2-E2	
IC5402	8-759-437-13	IC MC10H350P	
IC5403	8-759-638-03	IC ISPLSI1032E-100LT-C01V1	
IC5405	8-759-186-60	IC TC74VHC240F	
IC5406	8-759-186-60	IC TC74VHC240F	
IC5601	8-759-081-48	IC TC74VHC08F	
IC5602	8-759-470-51	IC MB88141APFV-ER	
IC5603	8-759-544-55	IC MAX4066CEE-TE2	
IC5604	8-759-381-53	IC UPC814G2-E2	
IC5605	8-759-482-47	IC M62399FP-TE2	
IC5606	8-759-544-55	IC MAX4066CEE-TE2	
IC5607	8-752-080-99	IC CXA2112R	
IC5608	8-752-080-99	IC CXA2112R	
IC5609	8-759-530-57	IC TLV431ACDBV2	
IC5801	8-759-544-55	IC MAX4066CEE-TE2	
IC5802	8-752-080-99	IC CXA2112R	
IC5803	8-752-080-99	IC CXA2112R	
IC5804	8-759-381-53	IC UPC814G2-E2	
IC5805	8-759-544-55	IC MAX4066CEE-TE2	
IC5806	8-752-080-99	IC CXA2112R	
IC5807	8-752-080-99	IC CXA2112R	
IC5808	8-759-381-53	IC UPC814G2-E2	
	<COIL>		
L5002	1-416-948-21	INDUCTOR 10mmH	
	<TRANSISTOR>		
Q5001	8-729-900-53	TRANSISTOR DTC114EK	
Q5002	8-729-216-22	TRANSISTOR 2SA1162-G	
Q5601	8-729-013-28	TRANSISTOR HN1B01FU-TE85R	
Q5602	8-729-013-28	TRANSISTOR HN1B01FU-TE85R	
Q5603	8-729-013-28	TRANSISTOR HN1B01FU-TE85R	
Q5604	8-729-231-80	TRANSISTOR 2SC2859-Y	

Ref.No.	Part No.	Description			Remark
Q5605	8-729-038-80	TRANSISTOR 2SA1182-Y(TE85R)			
Q5801	8-729-013-28	TRANSISTOR HN1B01FU-TE85R			
Q5802	8-729-231-80	TRANSISTOR 2SC2859-Y			
Q5803	8-729-038-80	TRANSISTOR 2SA1182-Y(TE85R)			
Q5804	8-729-013-28	TRANSISTOR HN1B01FU-TE85R			
Q5805	8-729-231-80	TRANSISTOR 2SC2859-Y			
Q5806	8-729-038-80	TRANSISTOR 2SA1182-Y(TE85R)			
	<RESISTOR>				
R5001	1-216-295-91	SHORT	0		
R5002	1-216-295-91	SHORT	0		
R5003	1-216-097-91	RES,CHIP	100K	5%	1/10W
R5004	1-216-295-91	SHORT	0		
R5005	1-216-097-91	RES,CHIP	100K	5%	1/10W
R5006	1-216-073-00	RES,CHIP	10K	5%	1/10W
R5007	1-216-296-91	SHORT	0		
R5008	1-216-296-91	SHORT	0		
R5009	1-216-097-91	RES,CHIP	100K	5%	1/10W
R5010	1-216-073-00	RES,CHIP	10K	5%	1/10W
R5011	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R5012	1-216-073-00	RES,CHIP	10K	5%	1/10W
R5013	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R5014	1-216-296-91	SHORT	0		
R5015	1-216-073-00	RES,CHIP	10K	5%	1/10W
R5016	1-216-073-00	RES,CHIP	10K	5%	1/10W
R5017	1-216-683-11	METAL CHIP	22K	0.50%	1/10W
R5018	1-216-651-11	METAL CHIP	1K	0.50%	1/10W
R5019	1-216-693-11	METAL CHIP	56K	0.50%	1/10W
R5020	1-216-651-11	METAL CHIP	1K	0.50%	1/10W
R5021	1-216-295-91	SHORT	0		
R5022	1-216-684-91	METAL CHIP	24K	0.50%	1/10W
R5023	1-216-675-91	METAL CHIP	10K	0.50%	1/10W
R5024	1-216-296-91	SHORT	0		
R5025	1-216-296-91	SHORT	0		
R5026	1-216-025-91	RES,CHIP	100	5%	1/10W
R5027	1-216-296-91	SHORT	0		
R5030	1-216-041-00	RES,CHIP	470	5%	1/10W
R5032	1-216-073-00	RES,CHIP	10K	5%	1/10W
R5033	1-216-073-00	RES,CHIP	10K	5%	1/10W
R5034	1-216-073-00	RES,CHIP	10K	5%	1/10W
R5039	1-216-627-11	METAL CHIP	100	0.50%	1/10W
R5040	1-216-627-11	METAL CHIP	100	0.50%	1/10W
R5041	1-216-627-11	METAL CHIP	100	0.50%	1/10W
R5042	1-216-627-11	METAL CHIP	100	0.50%	1/10W
R5043	1-216-627-11	METAL CHIP	100	0.50%	1/10W
R5044	1-216-627-11	METAL CHIP	100	0.50%	1/10W
R5047	1-216-295-91	SHORT	0		
R5048	1-216-295-91	SHORT	0		
R5049	1-216-295-91	SHORT	0		
R5050	1-216-628-11	METAL CHIP	110	0.50%	1/10W
R5051	1-216-628-11	METAL CHIP	110	0.50%	1/10W
R5052	1-216-628-11	METAL CHIP	110	0.50%	1/10W
R5053	1-216-295-91	SHORT	0		
R5054	1-216-627-11	METAL CHIP	100	0.50%	1/10W
R5055	1-216-295-91	SHORT	0		
R5056	1-216-627-11	METAL CHIP	100	0.50%	1/10W
R5057	1-216-295-91	SHORT	0		
R5058	1-216-627-11	METAL CHIP	100	0.50%	1/10W
R5060	1-216-073-00	RES,CHIP	10K	5%	1/10W
R5061	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R5062	1-216-688-11	METAL CHIP	36K	0.50%	1/10W
R5063	1-216-651-11	METAL CHIP	1K	0.50%	1/10W
R5064	1-216-675-91	METAL CHIP	10K	0.50%	1/10W
R5065	1-216-073-00	RES,CHIP	10K	5%	1/10W
R5066	1-216-073-00	RES,CHIP	10K	5%	1/10W
R5067	1-216-073-00	RES,CHIP	10K	5%	1/10W
R5068	1-216-650-11	METAL CHIP	910	0.50%	1/10W
R5069	1-216-650-11	METAL CHIP	910	0.50%	1/10W
R5070	1-216-650-11	METAL CHIP	910	0.50%	1/10W
R5071	1-216-073-00	RES,CHIP	10K	5%	1/10W
R5072	1-216-683-11	METAL CHIP	22K	0.50%	1/10W
R5073	1-216-691-11	METAL CHIP	47K	0.50%	1/10W
R5074	1-216-691-11	METAL CHIP	47K	0.50%	1/10W
R5075	1-216-295-91	SHORT	0		
R5076	1-216-041-00	RES,CHIP	470	5%	1/10W
R5201	1-216-633-11	METAL CHIP	180	0.50%	1/10W
R5202	1-216-633-11	METAL CHIP	180	0.50%	1/10W
R5203	1-216-633-11	METAL CHIP	180	0.50%	1/10W
R5207	1-216-624-11	METAL CHIP	75	0.50%	1/10W
R5208	1-216-640-11	METAL CHIP	360	0.50%	1/10W
R5209	1-216-624-11	METAL CHIP	75	0.50%	1/10W
R5210	1-216-640-11	METAL CHIP	360	0.50%	1/10W
R5211	1-216-624-11	METAL CHIP	75	0.50%	1/10W
R5212	1-216-640-11	METAL CHIP	360	0.50%	1/10W
R5213	1-216-295-91	SHORT	0		
R5214	1-216-295-91	SHORT	0		
R5215	1-216-295-91	SHORT	0		
R5216	1-216-640-11	METAL CHIP	360	0.50%	1/10W
R5217	1-216-633-11	METAL CHIP	180	0.50%	1/10W
R5218	1-216-640-11	METAL CHIP	360	0.50%	1/10W
R5219	1-216-633-11	METAL CHIP	180	0.50%	1/10W
R5220	1-216-640-11	METAL CHIP	360	0.50%	1/10W
R5221	1-216-633-11	METAL CHIP	180	0.50%	1/10W
R5225	1-216-624-11	METAL CHIP	75	0.50%	1/10W
R5226	1-216-624-11	METAL CHIP	75	0.50%	1/10W
R5227	1-216-624-11	METAL CHIP	75	0.50%	1/10W
R5228	1-216-073-00	RES,CHIP	10K	5%	1/10W
R5229	1-216-073-00	RES,CHIP	10K	5%	1/10W
R5230	1-216-073-00	RES,CHIP	10K	5%	1/10W
R5231	1-216-627-11	METAL CHIP	100	0.50%	1/10W
R5232	1-216-627-11	METAL CHIP	100	0.50%	1/10W
R5233	1-216-627-11	METAL CHIP	100	0.50%	1/10W
R5234	1-216-675-91	METAL CHIP	10K	0.50%	1/10W
R5235	1-216-675-91	METAL CHIP	10K	0.50%	1/10W
R5236	1-216-675-91	METAL CHIP	10K	0.50%	1/10W
R5237	1-216-679-11	METAL CHIP	15K	0.50%	1/10W
R5238	1-216-683-11	METAL CHIP	22K	0.50%	1/10W
R5239	1-216-679-11	METAL CHIP	15K	0.50%	1/10W
R5240	1-216-683-11	METAL CHIP	22K	0.50%	1/10W
R5241	1-216-679-11	METAL CHIP	15K	0.50%	1/10W
R5242	1-216-683-11	METAL CHIP	22K	0.50%	1/10W
R5243	1-216-683-11	METAL CHIP	22K	0.50%	1/10W
R5244	1-216-675-91	METAL CHIP	10K	0.50%	1/10W
R5245	1-216-675-91	METAL CHIP	10K	0.50%	1/10W
R5246	1-216-675-91	METAL CHIP	10K	0.50%	1/10W
R5251	1-216-669-11	METAL CHIP	5.6K	0.50%	1/10W
R5252	1-216-669-11	METAL CHIP	5.6K	0.50%	1/10W
R5253	1-216-679-11	METAL CHIP	15K	0.50%	1/10W
R5254	1-216-679-11	METAL CHIP	15K	0.50%	1/10W
R5255	1-216-679-11	METAL CHIP	15K	0.50%	1/10W
R5256	1-218-776-11	METAL CHIP	1M	0.50%	1/10W
R5257	1-218-776-11	METAL CHIP	1M	0.50%	1/10W
R5258	1-218-776-11	METAL CHIP	1M	0.50%	1/10W
R5259	1-216-043-91	RES,CHIP	560	5%	1/10W
R5260	1-216-659-11	METAL CHIP	2.2K	0.50%	1/10W
R5261	1-216-659-11	METAL CHIP	2.2K	0.50%	1/10W
R5262	1-216-659-11	METAL CHIP	2.2K	0.50%	1/10W
R5263	1-216-685-11	METAL CHIP	27K	0.50%	1/10W
R5264	1-216-685-11	METAL CHIP	27K	0.50%	1/10W
R5265	1-216-685-11	METAL CHIP	27K	0.50%	1/10W
R5266	1-216-685-11	METAL CHIP	27K	0.50%	1/10W

Ref.No.	Part No.	Description			Remark
R5267	1-216-685-11	METAL CHIP	27K	0.50%	1/10W
R5268	1-216-685-11	METAL CHIP	27K	0.50%	1/10W
R5269	1-216-695-11	METAL CHIP	68K	0.50%	1/10W
R5270	1-216-695-11	METAL CHIP	68K	0.50%	1/10W
R5271	1-216-695-11	METAL CHIP	68K	0.50%	1/10W
R5272	1-216-295-91	SHORT	0		
R5273	1-216-295-91	SHORT	0		
R5274	1-216-295-91	SHORT	0		
R5409	1-216-295-91	SHORT	0		
R5410	1-216-017-91	RES,CHIP	47	5%	1/10W
R5411	1-216-295-91	SHORT	0		
R5412	1-216-295-91	SHORT	0		
R5413	1-216-017-91	RES,CHIP	47	5%	1/10W
R5415	1-216-073-00	RES,CHIP	10K	5%	1/10W
R5417	1-216-630-11	METAL CHIP	130	0.50%	1/10W
R5418	1-216-630-11	METAL CHIP	130	0.50%	1/10W
R5419	1-216-630-11	METAL CHIP	130	0.50%	1/10W
R5420	1-216-630-11	METAL CHIP	130	0.50%	1/10W
R5422	1-216-017-91	RES,CHIP	47	5%	1/10W
R5423	1-216-017-91	RES,CHIP	47	5%	1/10W
R5425	1-216-625-11	METAL CHIP	82	0.50%	1/10W
R5426	1-216-625-11	METAL CHIP	82	0.50%	1/10W
R5427	1-216-625-11	METAL CHIP	82	0.50%	1/10W
R5428	1-216-625-11	METAL CHIP	82	0.50%	1/10W
R5429	1-216-049-91	RES,CHIP	1K	5%	1/10W
R5430	1-216-073-00	RES,CHIP	10K	5%	1/10W
R5431	1-216-073-00	RES,CHIP	10K	5%	1/10W
R5433	1-216-295-91	SHORT	0		
R5434	1-216-295-91	SHORT	0		
R5437	1-216-017-91	RES,CHIP	47	5%	1/10W
R5438	1-216-017-91	RES,CHIP	47	5%	1/10W
R5439	1-216-017-91	RES,CHIP	47	5%	1/10W
R5440	1-216-017-91	RES,CHIP	47	5%	1/10W
R5441	1-216-017-91	RES,CHIP	47	5%	1/10W
R5442	1-216-017-91	RES,CHIP	47	5%	1/10W
R5443	1-216-017-91	RES,CHIP	47	5%	1/10W
R5444	1-216-017-91	RES,CHIP	47	5%	1/10W
R5445	1-216-017-91	RES,CHIP	47	5%	1/10W
R5446	1-216-017-91	RES,CHIP	47	5%	1/10W
R5447	1-216-017-91	RES,CHIP	47	5%	1/10W
R5448	1-216-017-91	RES,CHIP	47	5%	1/10W
R5451	1-216-017-91	RES,CHIP	47	5%	1/10W
R5452	1-216-017-91	RES,CHIP	47	5%	1/10W
R5453	1-216-017-91	RES,CHIP	47	5%	1/10W
R5454	1-216-017-91	RES,CHIP	47	5%	1/10W
R5455	1-216-017-91	RES,CHIP	47	5%	1/10W
R5456	1-216-017-91	RES,CHIP	47	5%	1/10W
R5457	1-216-017-91	RES,CHIP	47	5%	1/10W
R5464	1-216-017-91	RES,CHIP	47	5%	1/10W
R5465	1-216-017-91	RES,CHIP	47	5%	1/10W
R5466	1-216-017-91	RES,CHIP	47	5%	1/10W
R5467	1-216-017-91	RES,CHIP	47	5%	1/10W
R5468	1-216-017-91	RES,CHIP	47	5%	1/10W
R5469	1-216-017-91	RES,CHIP	47	5%	1/10W
R5475	1-216-017-91	RES,CHIP	47	5%	1/10W
R5476	1-216-049-91	RES,CHIP	1K	5%	1/10W
R5477	1-216-049-91	RES,CHIP	1K	5%	1/10W
R5478	1-216-049-91	RES,CHIP	1K	5%	1/10W
R5479	1-216-049-91	RES,CHIP	1K	5%	1/10W
R5480	1-216-049-91	RES,CHIP	1K	5%	1/10W
R5481	1-216-049-91	RES,CHIP	1K	5%	1/10W
R5482	1-216-049-91	RES,CHIP	1K	5%	1/10W
R5483	1-216-049-91	RES,CHIP	1K	5%	1/10W
R5484	1-216-049-91	RES,CHIP	1K	5%	1/10W
R5485	1-216-049-91	RES,CHIP	1K	5%	1/10W
R5486	1-216-049-91	RES,CHIP	1K	5%	1/10W

Ref.No.	Part No.	Description			Remark
R5487	1-216-049-91	RES,CHIP	1K	5%	1/10W
R5488	1-216-049-91	RES,CHIP	1K	5%	1/10W
R5617	1-216-097-91	RES,CHIP	100K	5%	1/10W
R5619	1-216-097-91	RES,CHIP	100K	5%	1/10W
R5622	1-216-295-91	SHORT	0		
R5629	1-216-295-91	SHORT	0		
R5630	1-216-295-91	SHORT	0		
R5632	1-216-298-00	RES,CHIP	2.2	5%	1/10W
R5633	1-216-190-00	RES,CHIP	470	5%	1/8W
R5635	1-216-190-00	RES,CHIP	470	5%	1/8W
R5638	1-216-295-91	SHORT	0		
R5642	1-216-298-00	RES,CHIP	2.2	5%	1/10W
R5645	1-216-298-00	RES,CHIP	2.2	5%	1/10W
R5646	1-216-295-91	SHORT	0		
R5647	1-216-295-91	SHORT	0		
R5648	1-216-025-91	RES,CHIP	100	5%	1/10W
R5650	1-216-190-00	RES,CHIP	470	5%	1/8W
R5654	1-216-295-91	SHORT	0		
R5655	1-216-298-00	RES,CHIP	2.2	5%	1/10W
R5656	1-216-298-00	RES,CHIP	2.2	5%	1/10W
R5657	1-216-190-00	RES,CHIP	470	5%	1/8W
R5660	1-216-295-91	SHORT	0		
R5661	1-216-097-91	RES,CHIP	100K	5%	1/10W
R5662	1-216-295-91	SHORT	0		
R5663	1-216-295-91	SHORT	0		
R5667	1-216-295-91	SHORT	0		
R5669	1-216-295-91	SHORT	0		
R5671	1-216-067-00	RES,CHIP	5.6K	5%	1/10W
R5672	1-216-025-91	RES,CHIP	100	5%	1/10W
R5676	1-216-073-00	RES,CHIP	10K	5%	1/10W
R5677	1-216-295-91	SHORT	0		
R5683	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R5685	1-216-295-91	SHORT	0		
R5700	1-216-624-11	METAL CHIP	75	0.50%	1/10W
R5701	1-216-624-11	METAL CHIP	75	0.50%	1/10W
R5702	1-216-073-00	RES,CHIP	10K	5%	1/10W
R5703	1-216-073-00	RES,CHIP	10K	5%	1/10W
R5704	1-216-073-00	RES,CHIP	10K	5%	1/10W
R5705	1-216-073-00	RES,CHIP	10K	5%	1/10W
R5709	1-216-001-00	RES,CHIP	10	5%	1/10W
R5710	1-216-685-11	METAL CHIP	27K	0.50%	1/10W
R5711	1-216-097-91	RES,CHIP	100K	5%	1/10W
R5712	1-216-685-11	METAL CHIP	27K	0.50%	1/10W
R5713	1-216-073-00	RES,CHIP	10K	5%	1/10W
R5714	1-216-073-00	RES,CHIP	10K	5%	1/10W
R5715	1-216-073-00	RES,CHIP	10K	5%	1/10W
R5716	1-216-073-00	RES,CHIP	10K	5%	1/10W
R5723	1-216-009-91	RES,CHIP	22	5%	1/10W
R5724	1-216-009-91	RES,CHIP	22	5%	1/10W
R5725	1-216-009-91	RES,CHIP	22	5%	1/10W
R5726	1-216-009-91	RES,CHIP	22	5%	1/10W
R5727	1-216-009-91	RES,CHIP	22	5%	1/10W
R5728	1-216-009-91	RES,CHIP	22	5%	1/10W
R5729	1-216-009-91	RES,CHIP	22	5%	1/10W
R5730	1-216-009-91	RES,CHIP	22	5%	1/10W
R5731	1-216-009-91	RES,CHIP	22	5%	1/10W
R5732	1-216-009-91	RES,CHIP	22	5%	1/10W
R5733	1-216-009-91	RES,CHIP	22	5%	1/10W
R5734	1-216-009-91	RES,CHIP	22	5%	1/10W
R5735	1-216-025-91	RES,CHIP	100	5%	1/10W
R5736	1-216-073-00	RES,CHIP	10K	5%	1/10W
R5738	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R5739	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R5740	1-216-001-00	RES,CHIP	10	5%	1/10W
R5741	1-216-073-00	RES,CHIP	10K	5%	1/10W
R5743	1-216-296-91	SHORT	0		

Ref.No.	Part No.	Description			Remark
R5744	1-216-298-00	RES,CHIP	2.2	5%	1/10W
R5745	1-216-298-00	RES,CHIP	2.2	5%	1/10W
R5746	1-216-296-91	SHORT	0		
R5747	1-216-295-91	SHORT	0		
R5748	1-216-073-00	RES,CHIP	10K	5%	1/10W
R5750	1-216-683-11	METAL CHIP	22K	0.50%	1/10W
R5751	1-216-685-11	METAL CHIP	27K	0.50%	1/10W
R5752	1-216-685-11	METAL CHIP	27K	0.50%	1/10W
R5753	1-216-043-91	RES,CHIP	560	5%	1/10W
R5801	1-216-624-11	METAL CHIP	75	0.50%	1/10W
R5802	1-216-624-11	METAL CHIP	75	0.50%	1/10W
R5803	1-216-295-91	SHORT	0		
R5804	1-216-295-91	SHORT	0		
R5805	1-216-025-91	RES,CHIP	100	5%	1/10W
R5806	1-216-001-00	RES,CHIP	10	5%	1/10W
R5807	1-216-685-11	METAL CHIP	27K	0.50%	1/10W
R5808	1-216-097-91	RES,CHIP	100K	5%	1/10W
R5809	1-216-685-11	METAL CHIP	27K	0.50%	1/10W
R5810	1-216-073-00	RES,CHIP	10K	5%	1/10W
R5811	1-216-073-00	RES,CHIP	10K	5%	1/10W
R5812	1-216-073-00	RES,CHIP	10K	5%	1/10W
R5813	1-216-073-00	RES,CHIP	10K	5%	1/10W
R5814	1-216-295-91	SHORT	0		
R5815	1-216-295-91	SHORT	0		
R5816	1-216-025-91	RES,CHIP	100	5%	1/10W
R5817	1-216-009-91	RES,CHIP	22	5%	1/10W
R5818	1-216-009-91	RES,CHIP	22	5%	1/10W
R5819	1-216-009-91	RES,CHIP	22	5%	1/10W
R5820	1-216-009-91	RES,CHIP	22	5%	1/10W
R5821	1-216-009-91	RES,CHIP	22	5%	1/10W
R5822	1-216-009-91	RES,CHIP	22	5%	1/10W
R5823	1-216-009-91	RES,CHIP	22	5%	1/10W
R5824	1-216-009-91	RES,CHIP	22	5%	1/10W
R5825	1-216-009-91	RES,CHIP	22	5%	1/10W
R5826	1-216-009-91	RES,CHIP	22	5%	1/10W
R5827	1-216-009-91	RES,CHIP	22	5%	1/10W
R5828	1-216-009-91	RES,CHIP	22	5%	1/10W
R5829	1-216-025-91	RES,CHIP	100	5%	1/10W
R5830	1-216-073-00	RES,CHIP	10K	5%	1/10W
R5832	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R5833	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R5834	1-216-001-00	RES,CHIP	10	5%	1/10W
R5835	1-216-073-00	RES,CHIP	10K	5%	1/10W
R5837	1-216-296-91	SHORT	0		
R5838	1-216-298-00	RES,CHIP	2.2	5%	1/10W
R5839	1-216-298-00	RES,CHIP	2.2	5%	1/10W
R5840	1-216-296-91	SHORT	0		
R5841	1-216-295-91	SHORT	0		
R5842	1-216-073-00	RES,CHIP	10K	5%	1/10W
R5844	1-216-624-11	METAL CHIP	75	0.50%	1/10W
R5845	1-216-023-00	RES,CHIP	82	5%	1/10W
R5846	1-216-630-11	METAL CHIP	130	0.50%	1/10W
R5847	1-216-624-11	METAL CHIP	75	0.50%	1/10W
R5848	1-216-023-00	RES,CHIP	82	5%	1/10W
R5849	1-216-630-11	METAL CHIP	130	0.50%	1/10W
R5850	1-216-295-91	SHORT	0		
R5851	1-216-295-91	SHORT	0		
R5852	1-216-025-91	RES,CHIP	100	5%	1/10W
R5853	1-216-001-00	RES,CHIP	10	5%	1/10W
R5854	1-216-295-91	SHORT	0		
R5855	1-216-295-91	SHORT	0		
R5856	1-216-685-11	METAL CHIP	27K	0.50%	1/10W
R5857	1-216-097-91	RES,CHIP	100K	5%	1/10W
R5858	1-216-685-11	METAL CHIP	27K	0.50%	1/10W
R5859	1-216-073-00	RES,CHIP	10K	5%	1/10W
R5860	1-216-073-00	RES,CHIP	10K	5%	1/10W
R5861	1-216-073-00	RES,CHIP	10K	5%	1/10W
R5862	1-216-073-00	RES,CHIP	10K	5%	1/10W
R5863	1-216-025-91	RES,CHIP	100	5%	1/10W
R5864	1-216-009-91	RES,CHIP	22	5%	1/10W
R5865	1-216-009-91	RES,CHIP	22	5%	1/10W
R5866	1-216-009-91	RES,CHIP	22	5%	1/10W
R5867	1-216-009-91	RES,CHIP	22	5%	1/10W
R5868	1-216-009-91	RES,CHIP	22	5%	1/10W
R5869	1-216-009-91	RES,CHIP	22	5%	1/10W
R5870	1-216-009-91	RES,CHIP	22	5%	1/10W
R5871	1-216-009-91	RES,CHIP	22	5%	1/10W
R5872	1-216-009-91	RES,CHIP	22	5%	1/10W
R5873	1-216-009-91	RES,CHIP	22	5%	1/10W
R5874	1-216-009-91	RES,CHIP	22	5%	1/10W
R5875	1-216-009-91	RES,CHIP	22	5%	1/10W
R5876	1-216-025-91	RES,CHIP	100	5%	1/10W
R5877	1-216-073-00	RES,CHIP	10K	5%	1/10W
R5879	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R5880	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R5881	1-216-001-00	RES,CHIP	10	5%	1/10W
R5882	1-216-073-00	RES,CHIP	10K	5%	1/10W
R5884	1-216-296-91	SHORT	0		
R5885	1-216-298-00	RES,CHIP	2.2	5%	1/10W
R5886	1-216-298-00	RES,CHIP	2.2	5%	1/10W
R5887	1-216-296-91	SHORT	0		
R5888	1-216-295-91	SHORT	0		
R5889	1-216-073-00	RES,CHIP	10K	5%	1/10W

<VARIABLE RESISTOR>

Ref.No.	Part No.	Description
RV5001	1-223-272-11	RES, ADJ, CERMET 470
RV5002	1-223-272-11	RES, ADJ, CERMET 470
RV5003	1-223-272-11	RES, ADJ, CERMET 470

<THERMISTOR>

Ref.No.	Part No.	Description
TH5001	1-806-715-11	THERMISTOR

****

* A-1316-401-A GAA COMPL
****

Part No.	Description	
1-533-189-11	HOLDER, FUSE	
1-543-923-11	FERRITE	0µH
3-179-084-01	LEVER (R), PC BOARD	
3-179-085-01	LEVER (L), PC BOARD	
4-382-854-11	SCREW (M3X10), P, SW (+)	
4-382-854-51	SCREW (M3X8), P, SW (+)	

<CAPACITOR>

Ref.No.	Part No.	Description			Remark
C7001	⚠1-113-511-11	FILM	0.47MF	20%	275V
C7002	1-137-477-11	FILM	0.47MF	10%	400V
C7003	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C7004	1-104-330-11	CERAMIC	470PF	10%	1 KV
C7005	1-104-330-11	CERAMIC	470PF	10%	1 KV
C7007	1-117-751-11	ELECT(BLOCK)	220MF	20%	450V
C7008	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C7009	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C7010	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C7031	⚠1-113-511-11	FILM	0.47MF	20%	275V
C7032	1-137-477-11	FILM	0.47MF	10%	400V
C7033	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C7034	1-104-330-11	CERAMIC	470PF	10%	1 KV

GAA

Ref.No.	Part No.	Description			Remark
C7035	1-104-330-11	CERAMIC	470PF	10%	1KV
C7037	1-117-751-11	ELECT(BLOCK)	220MF	20%	450V
C7038	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C7039	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C7040	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C7061	⚠1-113-511-11	FILM	0.47MF	20%	275V
C7062	1-137-477-11	FILM	0.47MF	10%	400V
C7063	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C7064	1-104-330-11	CERAMIC	470PF	10%	1KV
C7065	1-104-330-11	CERAMIC	470PF	10%	1KV
C7067	1-117-751-11	ELECT(BLOCK)	220MF	20%	450V
C7068	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C7069	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C7070	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C7201	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C7202	1-163-003-11	CERAMIC CHIP	330PF	10%	50V
C7203	1-164-492-11	CERAMIC CHIP	0.15MF	10%	16V
C7204	1-107-889-11	ELECT	220MF	20%	25V
C7205	1-165-319-11	CERAMIC CHIP	0.1MF		50V
C7206	1-163-113-00	CERAMIC CHIP	68PF	5%	50V
C7207	1-163-133-00	CERAMIC CHIP	470PF	5%	50V
C7208	1-164-492-11	CERAMIC CHIP	0.15MF	10%	16V
	<CONNECTOR>				
CN7001	*1-778-393-11	PIN, PC CONNECTOR 96P			
CN7002	*1-691-960-11	PIN, CONNECTOR (PC BOARD) 3P			
CN7003	*1-774-249-11	CONNECTOR, BOARD TO BOARD 10P			
CN7032	*1-691-960-11	PIN, CONNECTOR (PC BOARD) 3P			
CN7033	*1-774-249-11	CONNECTOR, BOARD TO BOARD 10P			
CN7062	*1-691-960-11	PIN, CONNECTOR (PC BOARD) 3P			
CN7063	*1-774-249-11	CONNECTOR, BOARD TO BOARD 10P			
CN7201	*1-774-246-11	CONNECTOR, BOARD TO BOARD 10P			
	<DIODE>				
D7001	⚠8-719-066-75	DIODE D6SB80			
D7002	8-719-066-76	DIODE TF861S			
D7003	8-719-055-30	DIODE D1FS4A-TA			
D7004	8-719-055-30	DIODE D1FS4A-TA			
D7005	8-719-055-30	DIODE D1FS4A-TA			
D7006	8-719-055-30	DIODE D1FS4A-TA			
D7007	8-719-060-06	DIODE FSF10A60			
D7008	1-803-136-11	VARISTOR ZP2600			
D7009	1-803-136-11	VARISTOR ZP2600			
D7031	⚠8-719-066-75	DIODE D6SB80			
D7032	8-719-066-76	DIODE TF861S			
D7033	8-719-055-30	DIODE D1FS4A-TA			
D7034	8-719-055-30	DIODE D1FS4A-TA			
D7035	8-719-055-30	DIODE D1FS4A-TA			
D7036	8-719-055-30	DIODE D1FS4A-TA			
D7037	8-719-060-06	DIODE FSF10A60			
D7038	1-803-136-11	VARISTOR ZP2600			
D7039	1-803-136-11	VARISTOR ZP2600			
D7061	⚠8-719-066-75	DIODE D6SB80			
D7062	8-719-066-76	DIODE TF861S			
D7063	8-719-055-30	DIODE D1FS4A-TA			
D7064	8-719-055-30	DIODE D1FS4A-TA			
D7065	8-719-055-30	DIODE D1FS4A-TA			
D7066	8-719-055-30	DIODE D1FS4A-TA			
D7067	8-719-060-06	DIODE FSF10A60			
D7068	1-803-136-11	VARISTOR ZP2600			
D7069	1-803-136-11	VARISTOR ZP2600			

Ref.No.	Part No.	Description				Remark
	<FUSE>					
F7001	⚠1-576-232-11	FUSE (H.B.C.) 5A/250V				
F7031	⚠1-576-232-11	FUSE (H.B.C.) 5A/250V				
F7061	⚠1-576-232-11	FUSE (H.B.C.) 5A/250V				
	<IC>					
IC7201	8-759-485-61	IC FA5331P				
	<COIL>					
L7001	⚠1-416-907-11	INDUCTOR	750μH			
L7031	⚠1-416-907-11	INDUCTOR	750μH			
L7061	⚠1-416-907-11	INDUCTOR	750μH			
	<TRANSISTOR>					
Q7001	8-729-043-15	TRANSISTOR 2SK3013F-02				
Q7002	8-729-043-15	TRANSISTOR 2SK3013F-02				
Q7031	8-729-043-15	TRANSISTOR 2SK3013F-02				
Q7032	8-729-043-15	TRANSISTOR 2SK3013F-02				
Q7061	8-729-043-15	TRANSISTOR 2SK3013F-02				
Q7062	8-729-043-15	TRANSISTOR 2SK3013F-02				
Q7201	8-729-230-49	TRANSISTOR 2SC2712-YG				
	<RESISTOR>					
R7001	1-219-363-11	FUSIBLE	5.6	5%	5W	F
R7002	1-219-363-11	FUSIBLE	5.6	5%	5W	F
R7004	1-217-156-00	REGISTER	0.22	10%	5W	F
R7005	1-215-870-11	METAL OXIDE	1.5K	5%	1W	F
R7006	1-216-487-11	METAL OXIDE	12K	5%	3W	F
R7007	1-216-487-11	METAL OXIDE	12K	5%	3W	F
R7008	1-216-003-11	RES,CHIP	12	5%	1/10W	
R7009	1-216-077-91	RES,CHIP	15K	5%	1/10W	
R7010	1-216-003-11	RES,CHIP	12	5%	1/10W	
R7011	1-216-077-91	RES,CHIP	15K	5%	1/10W	
R7012	1-218-231-11	RES,CHIP	1	10%	1/2W	
R7013	1-216-487-11	METAL OXIDE	12K	5%	3W	F
R7031	1-219-363-11	FUSIBLE	5.6	5%	5W	F
R7032	1-219-363-11	FUSIBLE	5.6	5%	5W	F
R7034	1-217-156-00	REGISTER	0.22	10%	5W	F
R7035	1-215-870-11	METAL OXIDE	1.5K	5%	1W	F
R7036	1-216-487-11	METAL OXIDE	12K	5%	3W	F
R7037	1-216-487-11	METAL OXIDE	12K	5%	3W	F
R7038	1-216-003-11	RES,CHIP	12	5%	1/10W	
R7039	1-216-077-91	RES,CHIP	15K	5%	1/10W	
R7040	1-216-003-11	RES,CHIP	12	5%	1/10W	
R7041	1-216-077-91	RES,CHIP	15K	5%	1/10W	
R7042	1-218-231-11	RES,CHIP	1	10%	1/2W	
R7043	1-216-487-11	METAL OXIDE	12K	5%	3W	F
R7061	1-219-363-11	FUSIBLE	5.6	5%	5W	F
R7062	1-219-363-11	FUSIBLE	5.6	5%	5W	F
R7064	1-217-156-00	REGISTER	0.22	10%	5W	F
R7065	1-215-870-11	METAL OXIDE	1.5K	5%	1W	F
R7066	1-216-487-11	METAL OXIDE	12K	5%	3W	F
R7067	1-216-487-11	METAL OXIDE	12K	5%	3W	F
R7068	1-216-003-11	RES,CHIP	12	5%	1/10W	
R7069	1-216-077-91	RES,CHIP	15K	5%	1/10W	
R7070	1-216-003-11	RES,CHIP	12	5%	1/10W	
R7071	1-216-077-91	RES,CHIP	15K	5%	1/10W	
R7072	1-218-231-11	RES,CHIP	1	10%	1/2W	
R7073	1-216-487-11	METAL OXIDE	12K	5%	3W	F
R7201	1-216-077-91	RES,CHIP	15K	5%	1/10W	
R7203	1-216-065-91	RES,CHIP	4.7K	5%	1/10W	

Ref.No.	Part No.	Description			Remark
R7204	1-216-687-11	METAL CHIP	33K	0.50%	1/10W
R7205	1-216-005-00	RES,CHIP	15	5%	1/10W
R7206	1-220-335-11	RES,CHIP	180K	5%	1/2W
R7207	1-216-025-91	RES,CHIP	100	5%	1/10W
R7208	1-216-089-91	RES,CHIP	47K	5%	1/10W
R7209	1-220-335-11	RES,CHIP	180K	5%	1/2W
R7210	1-220-337-11	RES,CHIP	270K	5%	1/2W
R7211	1-220-336-11	RES,CHIP	220K	5%	1/2W
R7212	1-220-335-11	RES,CHIP	180K	5%	1/2W
R7213	1-220-337-11	RES,CHIP	270K	5%	1/2W
R7214	1-216-655-11	METAL CHIP	1.5K	0.50%	1/10W
R7215	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R7216	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R7217	1-216-073-00	RES,CHIP	10K	5%	1/10W
R7218	1-216-101-00	RES,CHIP	150K	5%	1/10W
R7219	1-216-085-00	RES,CHIP	33K	5%	1/10W
R7220	1-216-629-11	METAL CHIP	120	0.50%	1/10W
R7221	1-220-336-11	RES,CHIP	220K	5%	1/2W
R7222	1-220-336-11	RES,CHIP	220K	5%	1/2W
R7223	1-216-077-91	RES,CHIP	15K	5%	1/10W
R7224	1-216-089-91	RES,CHIP	47K	5%	1/10W

****

* A-1316-402-A GAB COMPL
****

	1-533-189-11	HOLDER, FUSE	
	1-543-923-11	FERRITE	0µH
	3-179-084-01	LEVER (R), PC BOARD	
	3-179-085-01	LEVER (L), PC BOARD	
	4-382-854-11	SCREW (M3X10), P, SW (+)	

<CAPACITOR>

C7101	⚠1-113-511-11	FILM	0.47MF	20%	275V
C7102	1-137-477-11	FILM	0.47MF	10%	400V
C7103	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C7104	1-104-330-11	CERAMIC	470PF	10%	1KV
C7105	1-104-330-11	CERAMIC	470PF	10%	1KV
C7107	1-117-751-11	ELECT(BLOCK)	220MF	20%	450V
C7108	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C7109	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C7110	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C7151	⚠1-113-511-11	FILM	0.47MF	20%	275V
C7152	1-137-477-11	FILM	0.47MF	10%	400V
C7153	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C7154	1-104-330-11	CERAMIC	470PF	10%	1KV
C7155	1-104-330-11	CERAMIC	470PF	10%	1KV
C7157	1-117-751-11	ELECT(BLOCK)	220MF	20%	450V
C7158	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C7159	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C7160	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C7201	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C7202	1-163-003-11	CERAMIC CHIP	330PF	10%	50V
C7203	1-164-492-11	CERAMIC CHIP	0.15MF	10%	16V
C7204	1-107-889-11	ELECT	220MF	20%	25V
C7205	1-165-319-11	CERAMIC CHIP	0.1MF		50V
C7206	1-163-113-00	CERAMIC CHIP	68PF	5%	50V
C7207	1-163-133-00	CERAMIC CHIP	470PF	5%	50V
C7208	1-164-492-11	CERAMIC CHIP	0.15MF	10%	16V

<CONNECTOR>

Ref.No.	Part No.	Description	Remark
CN7101	* 1-778-393-11	PIN, PC CONNECTOR 96P	
CN7102	* 1-691-960-11	PIN, CONNECTOR (PC BOARD) 3P	
CN7103	* 1-774-249-11	CONNECTOR, BOARD TO BOARD 10P	
CN7152	* 1-691-960-11	PIN, CONNECTOR (PC BOARD) 3P	
CN7153	* 1-774-249-11	CONNECTOR, BOARD TO BOARD 10P	
CN7201*	1-774-246-11	CONNECTOR, BOARD TO BOARD 10P	

<DIODE>

D7101	⚠8-719-066-75	DIODE D6SB80
D7102	8-719-066-76	DIODE TF861S
D7103	8-719-055-30	DIODE D1FS4A-TA
D7104	8-719-055-30	DIODE D1FS4A-TA
D7105	8-719-055-30	DIODE D1FS4A-TA
D7106	8-719-055-30	DIODE D1FS4A-TA
D7107	8-719-060-06	DIODE FSF10A60
D7108	1-803-136-11	VARISTOR ZP2600
D7109	1-803-136-11	VARISTOR ZP2600
D7151	⚠8-719-066-75	DIODE D6SB80
D7152	8-719-066-76	DIODE TF861S
D7153	8-719-055-30	DIODE D1FS4A-TA
D7154	8-719-055-30	DIODE D1FS4A-TA
D7155	8-719-055-30	DIODE D1FS4A-TA
D7156	8-719-055-30	DIODE D1FS4A-TA
D7157	8-719-060-06	DIODE FSF10A60
D7158	1-803-136-11	VARISTOR ZP2600
D7159	1-803-136-11	VARISTOR ZP2600

<FUSE>

F7101	⚠1-576-232-11	FUSE (H.B.C.) 5A/250V
F7151	⚠1-576-232-11	FUSE (H.B.C.) 5A/250V

<IC>

IC7201	8-759-485-61	IC FA5331P

<COIL>

L7101	1-416-907-11	INDUCTOR	750µH
L7151	1-416-907-11	INDUCTOR	750µH

<TRANSISTOR>

Q7101	8-729-043-15	TRANSISTOR 2SK3013F-02
Q7102	8-729-043-15	TRANSISTOR 2SK3013F-02
Q7151	8-729-043-15	TRANSISTOR 2SK3013F-02
Q7152	8-729-043-15	TRANSISTOR 2SK3013F-02
Q7201	8-729-230-49	TRANSISTOR 2SC2712-YG

<RESISTOR>

R7101	1-219-363-11	FUSIBLE	5.6	5%	5W	F
R7102	1-219-363-11	FUSIBLE	5.6	5%	5W	F
R7104	1-217-156-00	REGISTER	0.22	10%	5W	F
R7105	1-215-870-11	METAL OXIDE	1.5K	5%	1W	F
R7106	1-216-487-11	METAL OXIDE	12K	5%	3W	F
R7107	1-216-487-11	METAL OXIDE	12K	5%	3W	F
R7108	1-216-003-11	RES,CHIP	12	5%	1/10W	
R7109	1-216-077-91	RES,CHIP	15K	5%	1/10W	
R7110	1-216-003-11	RES,CHIP	12	5%	1/10W	
R7111	1-216-077-91	RES,CHIP	15K	5%	1/10W	
R7112	1-216-487-11	METAL OXIDE	12K	5%	3W	F
R7151	1-219-363-11	FUSIBLE	5.6	5%	5W	F
R7152	1-219-363-11	FUSIBLE	5.6	5%	5W	F
R7154	1-217-156-00	REGISTER	0.22	10%	5W	F
R7155	1-215-870-11	METAL OXIDE	1.5K	5%	1W	F

GAB GB

Ref.No.	Part No.	Description				Remark
R7156	1-216-487-11	METAL OXIDE	12K	5%	3W	F
R7157	1-216-487-11	METAL OXIDE	12K	5%	3W	F
R7158	1-216-003-11	RES,CHIP	12	5%	1/10W	
R7159	1-216-077-91	RES,CHIP	15K	5%	1/10W	
R7160	1-216-003-11	RES,CHIP	12	5%	1/10W	
R7161	1-216-077-91	RES,CHIP	15K	5%	1/10W	
R7162	1-218-231-11	RES,CHIP	1	10%	1/2W	
R7163	1-216-487-11	METAL OXIDE	12K	5%	3W	F
R7201	1-216-077-91	RES,CHIP	15K	5%	1/10W	
R7203	1-216-065-91	RES,CHIP	4.7K	5%	1/10W	
R7204	1-216-687-11	METAL CHIP	33K	0.50%	1/10W	
R7205	1-216-005-00	RES,CHIP	15	5%	1/10W	
R7206	1-220-335-11	RES,CHIP	180K	5%	1/2W	
R7207	1-216-025-91	RES,CHIP	100	5%	1/10W	
R7208	1-216-089-91	RES,CHIP	47K	5%	1/10W	
R7209	1-220-335-11	RES,CHIP	180K	5%	1/2W	
R7210	1-220-337-11	RES,CHIP	270K	5%	1/2W	
R7211	1-220-336-11	RES,CHIP	220K	5%	1/2W	
R7212	1-220-335-11	RES,CHIP	180K	5%	1/2W	
R7213	1-220-337-11	RES,CHIP	270K	5%	1/2W	
R7214	1-216-655-11	METAL CHIP	1.5K	0.50%	1/10W	
R7215	1-216-057-00	RES,CHIP	2.2K	5%	1/10W	
R7216	1-216-057-00	RES,CHIP	2.2K	5%	1/10W	
R7217	1-216-073-00	RES,CHIP	10K	5%	1/10W	
R7218	1-216-101-00	RES,CHIP	150K	5%	1/10W	
R7219	1-216-085-00	RES,CHIP	33K	5%	1/10W	
R7220	1-216-629-11	METAL CHIP	120	0.50%	1/10W	
R7221	1-220-336-11	RES,CHIP	220K	5%	1/2W	
R7222	1-220-336-11	RES,CHIP	220K	5%	1/2W	
R7223	1-216-077-91	RES,CHIP	15K	5%	1/10W	
R7224	1-216-089-91	RES,CHIP	47K	5%	1/10W	

****

Part No.	Description
*A-1316-403-A	GB COMPL
	**********************
3-179-084-01	LEVER (R), PC BOARD
3-179-085-01	LEVER (L), PC BOARD
*4-041-261-01	SHEET, INSULATING
*4-057-443-01	HOLDER (CF), TR
4-382-854-01	SCREW (M3X8), P, SW (+)
4-382-854-51	SCREW (M3X8), P, SW (+)

<CAPACITOR>

Ref.No.	Part No.	Description			Remark
C7501	1-107-824-11	CERAMIC	220PF	5%	1KV
C7502	1-107-792-11	CERAMIC	100PF	5%	1KV
C7503	1-115-339-11	CERAMIC CHIP	0.1MF	10%	50V
C7504	1-107-888-11	ELECT	47MF	20%	25V
C7505	1-115-339-11	CERAMIC CHIP	0.1MF	10%	50V
C7506	1-107-914-11	ELECT	1000MF	20%	25V
C7507	1-113-903-11	CERAMIC	0.001MF	20%	250V
C7508	1-107-906-11	ELECT	10MF	20%	50V
C7509	1-115-742-11	ELECT	0.0027F	20%	10V
C7510	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C7512	1-115-742-11	ELECT	0.0027F	20%	10V
C7513	1-137-484-11	FILM	0.47MF	10%	630V
C7514	1-107-792-11	CERAMIC	100PF	5%	1KV
C7515	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C7516	1-115-802-11	ELECT	56MF	20%	35V
C7601	1-107-824-11	CERAMIC	220PF	5%	1KV
C7602	1-107-792-11	CERAMIC	100PF	5%	1KV
C7603	1-115-339-11	CERAMIC CHIP	0.1MF	10%	50V
C7604	1-107-888-11	ELECT	47MF	20%	25V
C7605	1-115-339-11	CERAMIC CHIP	0.1MF	10%	50V
C7606	1-115-742-11	ELECT	0.0027F	20%	10V
C7608	1-115-794-51	ELECT	0.0027F	20%	25V
C7610	1-115-786-11	ELECT	560MF	20%	25V
C7612	1-113-903-11	CERAMIC	0.001MF	20%	250V
C7614	1-107-906-11	ELECT	10MF	20%	50V
C7615	1-115-339-11	CERAMIC CHIP	0.1MF	10%	50V
C7616	1-115-734-11	ELECT	680MF	20%	10V
C7617	1-115-790-11	ELECT	0.0015F	20%	25V
C7618	1-111-087-11	ELECT	330MF	20%	25V
C7620	1-107-792-11	CERAMIC	100PF	5%	1KV
C7621	1-130-202-00	FILM	0.022MF	5%	400V
C7801	1-107-824-11	CERAMIC	220PF	5%	1KV
C7802	1-107-792-11	CERAMIC	100PF	5%	1KV
C7803	1-115-339-11	CERAMIC CHIP	0.1MF	10%	50V
C7804	1-107-888-11	ELECT	47MF	20%	25V
C7805	1-115-339-11	CERAMIC CHIP	0.1MF	10%	50V
C7806	1-113-903-11	CERAMIC	0.001MF	20%	250V
C7807	1-110-994-11	ELECT	0.0068F	20%	6.3V
C7808	1-115-746-11	ELECT	0.0056F	20%	10V
C7809	1-110-994-11	ELECT	0.0068F	20%	6.3V
C7810	1-115-742-11	ELECT	0.0027F	20%	10V
C7811	1-107-906-11	ELECT	10MF	20%	50V
C7812	1-115-742-11	ELECT	0.0027F	20%	10V
C7813	1-115-339-11	CERAMIC CHIP	0.1MF	10%	50V
C7815	1-115-742-11	ELECT	0.0027F	20%	10V
C7816	1-115-718-51	ELECT	0.0039F	20%	6.3V
C7817	1-115-737-11	ELECT	0.001F	20%	10V
C7818	1-115-339-11	CERAMIC CHIP	0.1MF	10%	50V
C7819	1-110-987-11	ELECT	0.0022F	20%	6.3V
C7820	1-115-710-31	ELECT	0.001F	20%	6.3V
C7822	1-107-792-11	CERAMIC	100PF	5%	1KV
C7823	1-130-202-00	FILM	0.022MF	5%	400V
C7824	1-115-818-51	ELECT	0.0018F	20%	35V
C7825	1-115-811-11	ELECT	560MF	20%	35V
C7826	1-110-994-11	ELECT	0.0068F	20%	6.3V

<CONNECTOR>

Ref.No.	Part No.	Description
CN7501	*1-691-960-11	PIN, CONNECTOR (PC BOARD) 3P
CN7502	*1-778-393-11	PIN, PC CONNECTOR 96P

<DIODE>

Ref.No.	Part No.	Description
D7501	8-719-059-23	DIODE P6KE200AG23
D7502	8-719-059-23	DIODE P6KE200AG23
D7503	8-719-059-23	DIODE P6KE200AG23
D7504	8-719-059-23	DIODE P6KE200AG23
D7505	8-719-947-06	DIODE RGP10JPKG23
D7506	8-719-300-33	DIODE RU-3AM
D7507	8-719-061-49	DIODE FCH20A10
D7508	8-719-050-21	DIODE FCQ20A04
D7509	8-719-106-35	DIODE RD8.2M-B2
D7601	8-719-059-23	DIODE P6KE200AG23
D7602	8-719-059-23	DIODE P6KE200AG23
D7603	8-719-059-23	DIODE P6KE200AG23
D7604	8-719-059-23	DIODE P6KE200AG23
D7605	8-719-947-06	DIODE RGP10JPKG23
D7606	8-719-300-33	DIODE RU-3AM
D7608	8-719-071-90	DIODE 11DQ10-TA2B5
D7609	8-719-510-41	DIODE D10SC9M
D7610	8-719-050-21	DIODE FCQ20A04
D7611	8-719-106-35	DIODE RD8.2M-B2
D7801	8-719-059-23	DIODE P6KE200AG23
D7802	8-719-059-23	DIODE P6KE200AG23
D7803	8-719-059-23	DIODE P6KE200AG23
D7804	8-719-059-23	DIODE P6KE200AG23
D7805	8-719-947-06	DIODE RGP10JPKG23

Ref.No.	Part No.	Description			Remark
D7806	8-719-300-33	DIODE RU-3AM			
D7807	8-719-050-21	DIODE FCQ20A04			
D7808	8-719-050-21	DIODE FCQ20A04			
D7809	8-719-510-13	DIODE D10SC4MR			
D7812	8-719-055-30	DIODE D1FS4A-TA			
D7813	8-719-104-34	DIODE 1S2836			
D7814	8-719-106-35	DIODE RD8.2M-B2			
D7815	8-719-071-53	DIODE F16P20FS			
	<IC>				
IC7501	8-759-490-02	IC TOP224Y-BB			
IC7502	8-759-388-23	IC TL431BCDR2			
IC7503	8-759-098-24	IC PQ30RV11			
IC7601	8-759-548-34	IC TOP227Y-BB			
IC7602	8-759-388-23	IC TL431BCDR2			
IC7801	8-759-548-33	IC TOP226Y-BB			
IC7802	8-759-388-23	IC TL431BCDR2			
IC7803	8-759-548-32	IC LT1269CT			
	<COIL>				
L7501	1-406-659-51	INDUCTOR	10μH		
L7602	1-412-525-31	INDUCTOR	10μH		
L7603	1-406-971-51	INDUCTOR	10μH		
L7604	1-406-659-51	INDUCTOR	10μH		
L7801	1-406-971-51	INDUCTOR	10μH		
L7802	1-412-525-31	INDUCTOR	10μH		
L7803	1-416-908-11	INDUCTOR	10μH		
L7804	1-406-659-51	INDUCTOR	10μH		
L7805	1-412-519-11	INDUCTOR	3.3μH		
L7806	1-412-525-31	INDUCTOR	10μH		
	<PHOTO COUPLER>				
PH7501	8-749-010-64	PHOTO COUPLER PC123F2			
PH7502	8-749-010-64	PHOTO COUPLER PC123F2			
PH7601	8-749-010-64	PHOTO COUPLER PC123F2			
PH7801	8-749-010-64	PHOTO COUPLER PC123F2			
	<IC LINK>				
PS7501	⚠1-533-597-31	LINK, IC			
PS7602	⚠1-576-124-11	LINK, IC			
PS7603	⚠1-533-790-31	LINK, IC			
PS7604	⚠1-533-595-31	LINK, IC			
PS7801	⚠1-533-282-21	LINK, IC			
PS7802	⚠1-576-288-31	RINK, IC			
PS7803	⚠1-533-595-31	LINK, IC			
PS7804	⚠1-533-596-21	LINK, IC			
PS7805	⚠1-533-282-21	LINK, IC			
	<TRANSISTOR>				
Q7501	8-729-230-49	TRANSISTOR 2SC2712-YG			
Q7502	8-729-230-49	TRANSISTOR 2SC2712-YG			
Q7503	8-729-216-22	TRANSISTOR 2SA1162-G			
Q7504	8-729-216-22	TRANSISTOR 2SA1162-G			
Q7801	8-729-216-22	TRANSISTOR 2SA1162-G			
	<RESISTOR>				
R7501	1-217-418-61	FUSIBLE	0.47	10%	1/2W F
R7502	1-249-377-11	CARBON	0.47	5%	1/4W F
R7503	1-260-127-11	CARBON	220K	5%	1/2W
R7505	1-216-025-91	RES,CHIP	100	5%	1/10W
R7506	1-260-127-11	CARBON	220K	5%	1/2W

Ref.No.	Part No.	Description			Remark
R7507	1-216-025-91	RES,CHIP	100	5%	1/10W
R7509	1-216-311-00	RES,CHIP	6.8	5%	1/10W
R7510	1-216-049-91	RES,CHIP	1K	5%	1/10W
R7511	1-216-049-91	RES,CHIP	1K	5%	1/10W
R7512	1-220-267-11	RES,CHIP	180	5%	1/2W
R7513	1-220-221-11	RES,CHIP	100	5%	1/2W
R7514	1-220-267-11	RES,CHIP	180	5%	1/2W
R7515	1-216-675-91	METAL CHIP	10K	0.50%	1/10W
R7516	1-216-667-11	METAL CHIP	4.7K	0.50%	1/10W
R7517	1-216-675-91	METAL CHIP	10K	0.50%	1/10W
R7519	1-216-073-00	RES,CHIP	10K	5%	1/10W
R7520	1-216-073-00	RES,CHIP	10K	5%	1/10W
R7521	1-216-073-00	RES,CHIP	10K	5%	1/10W
R7522	1-216-073-00	RES,CHIP	10K	5%	1/10W
R7523	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R7524	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R7525	1-260-127-11	CARBON	220K	5%	1/2W
R7526	1-260-127-11	CARBON	220K	5%	1/2W
R7527	1-216-683-11	METAL CHIP	22K	0.50%	1/10W
R7528	1-216-661-11	METAL CHIP	2.7K	0.50%	1/10W
R7529	1-216-661-11	METAL CHIP	2.7K	0.50%	1/10W
R7601	1-249-377-11	CARBON	0.47	5%	1/4W F
R7602	1-216-311-00	RES,CHIP	6.8	5%	1/10W
R7603	1-216-049-91	RES,CHIP	1K	5%	1/10W
R7604	1-218-326-11	RES,CHIP	470	5%	1/2W
R7605	1-218-326-11	RES,CHIP	470	5%	1/2W
R7606	1-216-689-11	METAL CHIP	39K	0.50%	1/10W
R7607	1-216-673-11	METAL CHIP	8.2K	0.50%	1/10W
R7608	1-216-689-11	METAL CHIP	39K	0.50%	1/10W
R7609	1-216-675-91	METAL CHIP	10K	0.50%	1/10W
R7610	1-215-903-11	METAL OXIDE	68K	5%	2W F
R7611	1-216-025-91	RES,CHIP	100	5%	1/10W
R7801	1-249-377-11	CARBON	0.47	5%	1/4W F
R7802	1-216-311-00	RES,CHIP	6.8	5%	1/10W
R7803	1-216-049-91	RES,CHIP	1K	5%	1/10W
R7804	1-220-221-11	RES,CHIP	100	5%	1/2W
R7805	1-220-267-11	RES,CHIP	180	5%	1/2W
R7806	1-216-655-11	METAL CHIP	1.5K	0.50%	1/10W
R7807	1-216-667-11	METAL CHIP	4.7K	0.50%	1/10W
R7809	1-216-683-11	METAL CHIP	22K	0.50%	1/10W
R7810	1-216-049-91	RES,CHIP	1K	5%	1/10W
R7814	1-216-655-11	METAL CHIP	1.5K	0.50%	1/10W
R7815	1-216-647-11	METAL CHIP	680	0.50%	1/10W
R7816	1-216-075-00	RES,CHIP	12K	5%	1/10W
R7817	1-215-903-11	METAL OXIDE	68K	5%	2W F
R7818	1-216-025-91	RES,CHIP	100	5%	1/10W
	<TRANSFORMER>				
T7501	⚠1-433-559-11	TRANSFORMER, CONVERTER (SRT)			
T7601	⚠1-433-567-11	TRANSFORMER, CONVERTER (SRT)			
T7801	⚠1-433-566-11	TRANSFORMER, CONVERTER (SRT)			

****

* A-1311-689-A GC MOUNT

****

Ref.No.	Part No.	Description			Remark
	<CAPACITOR>				
C7201	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C7202	1-163-003-11	CERAMIC CHIP	330PF	10%	50V
C7203	1-164-492-11	CERAMIC CHIP	0.15MF	10%	16V
C7204	1-107-889-11	ELECT	220MF	20%	25V
C7205	1-165-319-11	CERAMIC CHIP	0.1MF		50V

GC GF GM H

Ref.No.	Part No.	Description			Remark
C7206	1-163-113-11	CERAMIC CHIP	68PF	5%	50V
C7207	1-163-133-11	CERAMIC CHIP	470PF	5%	50V
C7208	1-164-492-11	CERAMIC CHIP	0.15MF	10%	16V
	<CONNECTOR>				
CN7201	* 1-774-246-11	CONNECTOR, BOARD TO BOARD 10P			
	<IC>				
IC7201	8-759-485-61	IC FA5331P			
	<TRANNSISTOR>				
Q7201	8-729-230-49	TRANSISTOR 2SC2712-YG			
	<RESISTOR>				
R7201	1-216-077-91	RES,CHIP	15K	5%	1/10W
R7203	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R7204	1-216-687-11	METAL CHIP	33K	0.50%	1/10W
R7205	1-216-005-00	RES,CHIP	15	5%	1/10W
R7206	1-220-335-11	RES,CHIP	180K	5%	1/2W
R7207	1-216-025-91	RES,CHIP	100	5%	1/10W
R7208	1-216-089-91	RES,CHIP	47K	5%	1/10W
R7209	1-220-335-11	RES,CHIP	180K	5%	1/2W
R7210	1-220-337-11	RES,CHIP	270K	5%	1/2W
R7211	1-220-336-11	RES,CHIP	270K	5%	1/2W
R7212	1-220-335-11	RES,CHIP	180K	5%	1/2W
R7213	1-220-337-11	RES,CHIP	270K	5%	1/2W
R7214	1-216-655-11	METAL CHIP	1.5K	0.50%	1/10W
R7215	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R7216	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R7217	1-216-073-00	RES,CHIP	10K	5%	1/10W
R7218	1-216-101-00	RES,CHIP	150K	5%	1/10W
R7219	1-216-085-00	RES,CHIP	33K	5%	1/10W
R7220	1-216-629-11	METAL CHIP	120	0.50%	1/10W
R7221	1-216-336-11	RES,CHIP	220K	5%	1/2W
R7222	1-220-336-11	RES,CHIP	220K	5%	1/2W
R7223	1-216-077-91	RES,CHIP	15K	5%	1/10W
R7224	1-216-089-91	RES,CHIP	47K	5%	1/10W

****

Ref.No.	Part No.	Description			Remark
	* 1-670-882-11	PWB, GF ***********************			
	* 1-533-701-11	HOLDER, FUSE (F101)			
	<CONNECTOR>				
CN101	* 1-580-230-21	PIN, CONNECTOR (PC BOARD) 2P (TO AC SOKET)			
CN102	* 1-580-230-11	PIN, CONNECTOR (PC BOARD) 2P			

****

Ref.No.	Part No.	Description			Remark
	* A-1311-694-A	GM MOUNT ***********************			
	* 4-374-846-01	COVER, CAPACITOR, CAP TYPE			
	<CAPACITOR>				
C201	⚠1-113-511-11	FILM	0.47MF	20%	275V
C202	⚠1-113-912-11	CERAMIC	0.0047MF	20%	250V
C203	⚠1-113-912-11	CERAMIC	0.0047MF	20%	250V
C204	⚠1-107-533-11	FILM	1MF	20%	250V
C205	⚠1-113-912-11	CERAMIC	0.0047MF	20%	250V
C206	⚠1-113-912-11	CERAMIC	0.0047MF	20%	250V
C207	⚠1-113-511-11	FILM	0.47MF	20%	275V
	<CONNECTOR>				
CN202	* 1-580-230-11	PIN, CONNECTOR (PC BOARD) 2P			
CN203	* 1-778-391-11	SOCKET, PC CONNECTOR 96P			
CN204	* 1-778-391-11	SOCKET, PC CONNECTOR 96P			
CN205	* 1-778-391-11	SOCKET, PC CONNECTOR 96P			
	<COIL>				
L201	⚠1-409-523-11	INDUCTOR	168μH		
L202	⚠1-409-523-11	INDUCTOR	168μH		
	<RESISTOR>				
R201	⚠1-202-882-51	SOLID	560K	20%	1/2W
R202	⚠1-202-882-51	SOLID	560K	20%	1/2W
	<TRANSFORMER>				
T201	⚠1-433-558-11	TRANSFORMER, LINE FILTER			
T202	⚠1-431-161-11	TRANSFORMER, LINE FILTER			
	<VARISTOR>				
VDR201	⚠1-801-073-41	VARISTOR ERZV14D471			

****

Ref.No.	Part No.	Description			Remark
	* A-1375-192-A	H COMPL ***********************			
	4-362-612-00	HOLDER (B), LED			
	<CAPACITOR>				
C6001	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C6002	1-164-506-11	CERAMIC CHIP	4.7MF		16V
C6003	1-128-391-11	ELECT CHIP	330MF	20%	6.3V
C6004	1-128-391-11	ELECT CHIP	330MF	20%	6.3V
C6201	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C6202	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C6203	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C6204	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C6205	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C6206	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C6207	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C6208	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C6209	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C6305	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C6306	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C6307	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C6308	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C6309	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C6310	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C6311	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C6312	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C6313	1-164-506-11	CERAMIC CHIP	4.7MF		16V
C6314	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C6315	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C6316	1-164-506-11	CERAMIC CHIP	4.7MF		16V

Ref.No.	Part No.	Description	Remark
C6321	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C6322	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C6323	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C6324	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C6325	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C6326	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C6327	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C6328	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C6329	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C6330	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C6331	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C6332	1-164-506-11	CERAMIC CHIP 4.7MF 16V	
C6333	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C6334	1-164-506-11	CERAMIC CHIP 4.7MF 16V	
C6335	1-128-391-11	ELECT CHIP 330MF 20% 6.3V	
C6336	1-128-391-11	ELECT CHIP 330MF 20% 6.3V	
	<CONNECTOR>		
CN6001	* 1-580-055-21	PIN, CONNECTOR (SMD) 2P	
CN6002	* 1-695-223-21	PIN, CONNECTOR (SMD) 10P	
CN6003	* 1-691-551-11	PIN, CONNECTOR (SMD) 8P	
CN6004	* 1-580-789-21	PIN, CONNECTOR (SMD) 6P	
	<DIODE>		
D6001	8-719-800-76	DIODE 1SS226	
D6002	8-719-800-76	DIODE 1SS226	
D6003	8-719-800-76	DIODE 1SS226	
D6004	8-719-800-76	DIODE 1SS226	
D6005	8-719-800-76	DIODE 1SS226	
D6006	8-719-800-76	DIODE 1SS226	
D6007	8-719-800-76	DIODE 1SS226	
D6008	8-719-800-76	DIODE 1SS226	
D6009	8-719-800-76	DIODE 1SS226	
D6010	8-719-800-76	DIODE 1SS226	
D6011	8-719-800-76	DIODE 1SS226	
D6012	8-719-800-76	DIODE 1SS226	
D6013	8-719-800-76	DIODE 1SS226	
D6014	8-719-800-76	DIODE 1SS226	
D6015	8-719-800-76	DIODE 1SS226	
D6016	8-719-800-76	DIODE 1SS226	
D6017	8-719-800-76	DIODE 1SS226	
D6201	8-719-976-22	DIODE MU03-2205 (1)	
D6202	8-719-976-22	DIODE MU03-2205 (3)	
D6203	8-719-914-43	DIODE DAN202K	
D6204	8-719-914-43	DIODE DAN202K	
D6205	8-719-976-22	DIODE MU03-2205 (2)	
D6206	8-719-976-22	DIODE MU03-2205 (4)	
D6301	8-719-045-61	DIODE SEC1901C (PIC)	
D6302	8-719-045-61	DIODE SEC1901C (RIGHT)	
D6303	8-719-045-61	DIODE SEC1901C (ENTER)	
D6304	8-719-045-61	DIODE SEC1901C (AUDIO)	
D6305	8-719-045-60	DIODE SEC1401C (RIGHT)	
D6306	8-719-045-60	DIODE SEC1401C (ENTER)	
D6307	8-719-045-61	DIODE SEC1901C (APA)	
D6308	8-719-045-61	DIODE SEC1901C (LEFT)	
D6309	8-719-045-61	DIODE SEC1901C (RESET)	
D6310	8-719-045-61	DIODE SEC1901C (VIDEO)	
D6311	8-719-045-60	DIODE SEC1401C (LEFT)	
D6312	8-719-045-60	DIODE SEC1401C (RESET)	
D6313	8-719-045-61	DIODE SEC1901C (SELECT)	
D6314	8-719-045-61	DIODE SEC1901C (DOWN)	
D6315	8-719-045-61	DIODE SEC1901C (ZOOM)	
D6316	8-719-045-61	DIODE SEC1901C (INPUT-A)	
D6317	8-719-045-60	DIODE SEC1401C (DOWN)	

Ref.No.	Part No.	Description	Remark
D6318	8-719-045-60	DIODE SEC1401C (ZOOM)	
D6319	8-719-045-61	DIODE SEC1901C (INPUT-B)	
D6320	8-719-045-61	DIODE SEC1901C (UP)	
D6321	8-719-045-61	DIODE SEC1901C (SHIFT)	
D6322	8-719-045-61	DIODE SEC1901C (INPUT-C)	
D6323	8-719-045-60	DIODE SEC1401C (UP)	
D6324	8-719-045-60	DIODE SEC1401C (SHIFT)	
D6325	8-719-045-61	DIODE SEC1901C (VOLUM+)	
D6326	8-719-045-61	DIODE SEC1901C (MENU)	
D6327	8-719-045-61	DIODE SEC1901C (FOCUS)	
D6328	8-719-045-61	DIODE SEC1901C (VOLUM–)	
D6329	8-719-045-60	DIODE SEC1401C (MENU)	
D6330	8-719-045-60	DIODE SEC1401C (FOCUS)	
D6331	8-719-045-61	DIODE SEC1901C (PATTERN)	
D6332	8-719-915-45	DIODE SLP162B (STAND BY)	
D6333	8-719-045-61	DIODE SEC1901C (LIGHT)	
D6334	8-719-045-61	DIODE SEC1901C (STAND BY)	
D6335	8-719-045-61	DIODE SEC1901C (ON)	
D6336	8-719-918-87	DIODE BG5531K (ON RED)	
	<DELAY LINE>		
DL6201	8-719-072-87	DIODE MU04-3101 (POWER SAVING)	
DL6202	8-719-071-09	DIODE MU04-2105 (COVER FAIL)	
DL6203	8-719-071-09	DIODE MU04-2105 (FAN FAIL)	
DL6204	8-719-071-09	DIODE MU04-2105 (HIGH TEMP)	
DL6205	8-719-071-09	DIODE MU04-2105 (LAMP FAIL)	
	<IC>		
IC6001	8-742-088-10	HYB IC SBX1780-51	
IC6301	8-759-470-51	IC MB88141APFV-ER	
IC6302	8-759-174-16	IC TC74VHC244F	
IC6303	8-759-470-51	IC MB88141APFV-ER	
IC6304	8-759-174-16	IC TC74VHC244F	
	<TRANSISTOR>		
Q6001	8-729-230-49	TRANSISTOR 2SC2712-YG	
Q6002	8-729-014-93	TRANSISTOR 2SB1440S-TX	
Q6201	8-729-216-22	TRANSISTOR 2SA1162-G	
Q6202	8-729-216-22	TRANSISTOR 2SA1162-G	
Q6203	8-729-216-22	TRANSISTOR 2SA1162-G	
Q6204	8-729-216-22	TRANSISTOR 2SA1162-G	
Q6205	8-729-230-49	TRANSISTOR 2SC2712-YG	
Q6206	8-729-230-49	TRANSISTOR 2SC2712-YG	
Q6207	8-729-230-49	TRANSISTOR 2SC2712-YG	
Q6208	8-729-230-49	TRANSISTOR 2SC2712-YG	
Q6209	8-729-216-22	TRANSISTOR 2SA1162-G	
Q6210	8-729-216-22	TRANSISTOR 2SA1162-G	
Q6211	8-729-216-22	TRANSISTOR 2SA1162-G	
Q6212	8-729-230-49	TRANSISTOR 2SC2712-YG	
Q6213	8-729-230-49	TRANSISTOR 2SC2712-YG	
Q6214	8-729-230-49	TRANSISTOR 2SC2712-YG	
Q6215	8-729-216-22	TRANSISTOR 2SA1162-G	
Q6216	8-729-216-22	TRANSISTOR 2SA1162-G	
Q6217	8-729-230-49	TRANSISTOR 2SC2712-YG	
Q6218	8-729-230-49	TRANSISTOR 2SC2712-YG	
Q6301	8-729-027-38	TRANSISTOR DTA144EKA-T14	
Q6302	8-729-027-38	TRANSISTOR DTA144EKA-T14	
Q6303	8-729-027-38	TRANSISTOR DTA144EKA-T14	
Q6304	8-729-027-38	TRANSISTOR DTA144EKA-T14	
Q6305	8-729-027-38	TRANSISTOR DTA144EKA-T14	
Q6306	8-729-027-38	TRANSISTOR DTA144EKA-T14	
Q6307	8-729-027-38	TRANSISTOR DTA144EKA-T14	
Q6308	8-729-027-38	TRANSISTOR DTA144EKA-T14	
Q6309	8-729-027-38	TRANSISTOR DTA144EKA-T14	
Q6310	8-729-027-38	TRANSISTOR DTA144EKA-T14	

Ref.No.	Part No.	Description			Remark
Q6311	8-729-014-93	TRANSISTOR 2SB1440S-TX			
Q6312	8-729-014-93	TRANSISTOR 2SB1440S-TX			
Q6313	8-729-230-49	TRANSISTOR 2SC2712-YG			
Q6314	8-729-230-49	TRANSISTOR 2SC2712-YG			
Q6315	8-729-230-49	TRANSISTOR 2SC2712-YG			
Q6316	8-729-230-49	TRANSISTOR 2SC2712-YG			
Q6317	8-729-230-49	TRANSISTOR 2SC2712-YG			
	<RESISTOR>				
R6002	1-216-049-91	RES,CHIP	1K	5%	1/10W
R6003	1-216-025-91	RES,CHIP	100	5%	1/10W
R6004	1-216-023-00	RES,CHIP	82	5%	1/10W
R6005	1-216-023-00	RES,CHIP	82	5%	1/10W
R6006	1-216-023-00	RES,CHIP	82	5%	1/10W
R6007	1-216-023-00	RES,CHIP	82	5%	1/10W
R6008	1-216-023-00	RES,CHIP	82	5%	1/10W
R6009	1-216-023-00	RES,CHIP	82	5%	1/10W
R6010	1-216-023-00	RES,CHIP	82	5%	1/10W
R6011	1-216-023-00	RES,CHIP	82	5%	1/10W
R6012	1-216-023-00	RES,CHIP	82	5%	1/10W
R6013	1-216-023-00	RES,CHIP	82	5%	1/10W
R6015	1-216-073-00	RES,CHIP	10K	5%	1/10W
R6016	1-216-025-91	RES,CHIP	100	5%	1/10W
R6017	1-216-025-91	RES,CHIP	100	5%	1/10W
R6018	1-216-025-91	RES,CHIP	100	5%	1/10W
R6019	1-216-025-91	RES,CHIP	100	5%	1/10W
R6020	1-216-025-91	RES,CHIP	100	5%	1/10W
R6021	1-216-025-91	RES,CHIP	100	5%	1/10W
R6022	1-216-025-91	RES,CHIP	100	5%	1/10W
R6023	1-216-025-91	RES,CHIP	100	5%	1/10W
R6024	1-216-025-91	RES,CHIP	100	5%	1/10W
R6025	1-216-025-91	RES,CHIP	100	5%	1/10W
R6026	1-216-025-91	RES,CHIP	100	5%	1/10W
R6027	1-216-025-91	RES,CHIP	100	5%	1/10W
R6028	1-216-025-91	RES,CHIP	100	5%	1/10W
R6029	1-216-025-91	RES,CHIP	100	5%	1/10W
R6030	1-216-025-91	RES,CHIP	100	5%	1/10W
R6031	1-216-025-91	RES,CHIP	100	5%	1/10W
R6101	1-216-083-00	RES,CHIP	27K	5%	1/10W
R6102	1-216-083-00	RES,CHIP	27K	5%	1/10W
R6103	1-216-083-00	RES,CHIP	27K	5%	1/10W
R6104	1-216-075-00	RES,CHIP	12K	5%	1/10W
R6105	1-216-075-00	RES,CHIP	12K	5%	1/10W
R6106	1-216-075-00	RES,CHIP	12K	5%	1/10W
R6107	1-216-069-00	RES,CHIP	6.8K	5%	1/10W
R6108	1-216-069-00	RES,CHIP	6.8K	5%	1/10W
R6109	1-216-069-00	RES,CHIP	6.8K	5%	1/10W
R6110	1-216-063-91	RES,CHIP	3.9K	5%	1/10W
R6111	1-216-063-91	RES,CHIP	3.9K	5%	1/10W
R6112	1-216-063-91	RES,CHIP	3.9K	5%	1/10W
R6113	1-216-059-00	RES,CHIP	2.7K	5%	1/10W
R6114	1-216-059-00	RES,CHIP	2.7K	5%	1/10W
R6115	1-216-059-00	RES,CHIP	2.7K	5%	1/10W
R6116	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R6117	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R6118	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R6119	1-216-053-00	RES,CHIP	1.5K	5%	1/10W
R6120	1-216-053-00	RES,CHIP	1.5K	5%	1/10W
R6121	1-216-053-00	RES,CHIP	1.5K	5%	1/10W
R6122	1-216-055-00	RES,CHIP	1.8K	5%	1/10W
R6123	1-216-055-00	RES,CHIP	1.8K	5%	1/10W
R6124	1-216-055-00	RES,CHIP	1.8K	5%	1/10W
R6125	1-216-073-00	RES,CHIP	10K	5%	1/10W
R6126	1-216-073-00	RES,CHIP	10K	5%	1/10W
R6127	1-216-073-00	RES,CHIP	10K	5%	1/10W
R6201	1-216-041-00	RES,CHIP	470	5%	1/10W
R6202	1-216-041-00	RES,CHIP	470	5%	1/10W
R6203	1-216-041-00	RES,CHIP	470	5%	1/10W
R6204	1-216-041-00	RES,CHIP	470	5%	1/10W
R6205	1-216-041-00	RES,CHIP	470	5%	1/10W
R6206	1-216-041-00	RES,CHIP	470	5%	1/10W
R6207	1-216-041-00	RES,CHIP	470	5%	1/10W
R6208	1-216-041-00	RES,CHIP	470	5%	1/10W
R6209	1-216-041-00	RES,CHIP	470	5%	1/10W
R6210	1-216-041-00	RES,CHIP	470	5%	1/10W
R6211	1-216-041-00	RES,CHIP	470	5%	1/10W
R6212	1-216-041-00	RES,CHIP	470	5%	1/10W
R6213	1-216-049-91	RES,CHIP	1K	5%	1/10W
R6214	1-216-049-91	RES,CHIP	1K	5%	1/10W
R6215	1-216-049-91	RES,CHIP	1K	5%	1/10W
R6216	1-216-049-91	RES,CHIP	1K	5%	1/10W
R6217	1-216-073-00	RES,CHIP	10K	5%	1/10W
R6218	1-216-073-00	RES,CHIP	10K	5%	1/10W
R6219	1-216-073-00	RES,CHIP	10K	5%	1/10W
R6220	1-216-073-00	RES,CHIP	10K	5%	1/10W
R6221	1-216-041-00	RES,CHIP	470	5%	1/10W
R6222	1-216-041-00	RES,CHIP	470	5%	1/10W
R6223	1-216-041-00	RES,CHIP	470	5%	1/10W
R6224	1-216-041-00	RES,CHIP	470	5%	1/10W
R6225	1-216-041-00	RES,CHIP	470	5%	1/10W
R6226	1-216-041-00	RES,CHIP	470	5%	1/10W
R6227	1-216-041-00	RES,CHIP	470	5%	1/10W
R6228	1-216-049-91	RES,CHIP	1K	5%	1/10W
R6229	1-216-049-91	RES,CHIP	1K	5%	1/10W
R6230	1-216-049-91	RES,CHIP	1K	5%	1/10W
R6231	1-216-073-00	RES,CHIP	10K	5%	1/10W
R6232	1-216-073-00	RES,CHIP	10K	5%	1/10W
R6233	1-216-073-00	RES,CHIP	10K	5%	1/10W
R6234	1-216-041-00	RES,CHIP	470	5%	1/10W
R6235	1-216-041-00	RES,CHIP	470	5%	1/10W
R6236	1-216-041-00	RES,CHIP	470	5%	1/10W
R6237	1-216-041-00	RES,CHIP	470	5%	1/10W
R6238	1-216-049-91	RES,CHIP	1K	5%	1/10W
R6239	1-216-049-91	RES,CHIP	1K	5%	1/10W
R6240	1-216-073-00	RES,CHIP	10K	5%	1/10W
R6241	1-216-073-00	RES,CHIP	10K	5%	1/10W
R6301	1-216-035-00	RES,CHIP	270	5%	1/10W
R6302	1-216-035-00	RES,CHIP	270	5%	1/10W
R6303	1-216-035-00	RES,CHIP	270	5%	1/10W
R6304	1-216-035-00	RES,CHIP	270	5%	1/10W
R6308	1-216-049-91	RES,CHIP	1K	5%	1/10W
R6309	1-216-049-91	RES,CHIP	1K	5%	1/10W
R6316	1-216-031-00	RES,CHIP	180	5%	1/10W
R6317	1-216-031-00	RES,CHIP	180	5%	1/10W
R6320	1-216-035-00	RES,CHIP	270	5%	1/10W
R6322	1-216-097-91	RES,CHIP	100K	5%	1/10W
R6323	1-216-025-91	RES,CHIP	100	5%	1/10W
R6324	1-216-097-91	RES,CHIP	100K	5%	1/10W
R6326	1-216-025-91	RES,CHIP	100	5%	1/10W
R6327	1-216-295-91	SHORT	0		
R6328	1-216-035-00	RES,CHIP	270	5%	1/10W
R6329	1-216-035-00	RES,CHIP	270	5%	1/10W
R6330	1-216-295-91	SHORT	0		
R6331	1-216-025-91	RES,CHIP	100	5%	1/10W
R6332	1-216-035-00	RES,CHIP	270	5%	1/10W
R6335	1-216-025-91	RES,CHIP	100	5%	1/10W
R6336	1-216-049-91	RES,CHIP	1K	5%	1/10W
R6337	1-216-049-91	RES,CHIP	1K	5%	1/10W
R6338	1-216-295-91	SHORT	0		
R6339	1-216-295-91	SHORT	0		
R6340	1-216-025-91	RES,CHIP	100	5%	1/10W

Ref.No.	Part No.	Description			Remark
R6342	1-216-025-91	RES,CHIP	100	5%	1/10W
R6343	1-216-031-00	RES,CHIP	180	5%	1/10W
R6344	1-216-031-00	RES,CHIP	180	5%	1/10W
R6345	1-216-035-00	RES,CHIP	270	5%	1/10W
R6346	1-216-025-91	RES,CHIP	100	5%	1/10W
R6347	1-216-025-91	RES,CHIP	100	5%	1/10W
R6348	1-216-035-00	RES,CHIP	270	5%	1/10W
R6349	1-216-035-00	RES,CHIP	270	5%	1/10W
R6350	1-216-035-00	RES,CHIP	270	5%	1/10W
R6351	1-216-049-91	RES,CHIP	1K	5%	1/10W
R6352	1-216-049-91	RES,CHIP	1K	5%	1/10W
R6353	1-216-031-00	RES,CHIP	180	5%	1/10W
R6354	1-216-031-00	RES,CHIP	180	5%	1/10W
R6355	1-216-035-00	RES,CHIP	270	5%	1/10W
R6356	1-216-035-00	RES,CHIP	270	5%	1/10W
R6357	1-216-035-00	RES,CHIP	270	5%	1/10W
R6358	1-216-035-00	RES,CHIP	270	5%	1/10W
R6359	1-216-049-91	RES,CHIP	1K	5%	1/10W
R6360	1-216-049-91	RES,CHIP	1K	5%	1/10W
R6361	1-216-031-00	RES,CHIP	180	5%	1/10W
R6362	1-216-031-00	RES,CHIP	180	5%	1/10W
R6363	1-216-035-00	RES,CHIP	270	5%	1/10W
R6364	1-216-035-00	RES,CHIP	270	5%	1/10W
R6365	1-216-035-00	RES,CHIP	270	5%	1/10W
R6366	1-216-035-00	RES,CHIP	270	5%	1/10W
R6367	1-216-049-91	RES,CHIP	1K	5%	1/10W
R6368	1-216-049-91	RES,CHIP	1K	5%	1/10W
R6371	1-216-031-00	RES,CHIP	180	5%	1/10W
R6372	1-216-031-00	RES,CHIP	180	5%	1/10W
R6374	1-216-035-00	RES,CHIP	270	5%	1/10W
R6384	1-216-097-91	RES,CHIP	100K	5%	1/10W
R6385	1-216-025-91	RES,CHIP	100	5%	1/10W
R6386	1-216-097-91	RES,CHIP	100K	5%	1/10W
R6387	1-216-049-91	RES,CHIP	1K	5%	1/10W
R6389	1-216-025-91	RES,CHIP	100	5%	1/10W
R6390	1-216-049-91	RES,CHIP	1K	5%	1/10W
R6391	1-216-295-91	SHORT	0		
R6393	1-216-025-91	RES,CHIP	100	5%	1/10W
R6394	1-216-073-00	RES,CHIP	10K	5%	1/10W
R6395	1-216-295-91	SHORT	0		
R6396	1-216-073-00	RES,CHIP	10K	5%	1/10W
R6397	1-216-295-91	SHORT	0		
R6398	1-216-025-91	RES,CHIP	100	5%	1/10W
R6401	1-216-025-91	RES,CHIP	100	5%	1/10W
R6402	1-216-295-91	SHORT	0		
R6403	1-216-025-91	RES,CHIP	100	5%	1/10W
R6404	1-216-025-91	RES,CHIP	100	5%	1/10W
R6405	1-216-025-91	RES,CHIP	100	5%	1/10W
R6408	1-216-035-00	RES,CHIP	270	5%	1/10W
R6410	1-216-035-00	RES,CHIP	270	5%	1/10W
R6411	1-216-035-00	RES,CHIP	270	5%	1/10W
R6412	1-216-073-00	RES,CHIP	10K	5%	1/10W
R6413	1-216-073-00	RES,CHIP	10K	5%	1/10W
R6414	1-216-073-00	RES,CHIP	10K	5%	1/10W
R6415	1-216-073-00	RES,CHIP	10K	5%	1/10W
R6416	1-216-073-00	RES,CHIP	10K	5%	1/10W
R6417	1-216-035-00	RES,CHIP	270	5%	1/10W
R6418	1-216-073-00	RES,CHIP	10K	5%	1/10W
R6419	1-216-035-00	RES,CHIP	270	5%	1/10W

<SWITCH>

Ref.No.	Part No.	Description	Remark
S6101	1-692-679-21	SWITCH, TACTILE (SELECT)	
S6102	1-692-679-21	SWITCH, TACTILE (INPUT-C)	
S6103	1-692-679-21	SWITCH, TACTILE (APA)	
S6104	1-692-679-21	SWITCH, TACTILE (VIDEO)	
S6105	1-692-679-21	SWITCH, TACTILE (INPUT-B)	
S6106	1-692-679-21	SWITCH, TACTILE (RESET)	
S6107	1-692-679-21	SWITCH, TACTILE (VOL–)	
S6108	1-692-679-21	SWITCH, TACTILE (INPUT-A)	
S6109	1-692-679-21	SWITCH, TACTILE (LEFT)	
S6110	1-692-679-21	SWITCH, TACTILE (VOL+)	
S6111	1-692-679-21	SWITCH, TACTILE (LIGHT)	
S6112	1-692-679-21	SWITCH, TACTILE (RIGHT)	
S6113	1-692-679-21	SWITCH, TACTILE (PIC MUTE)	
S6114	1-692-679-21	SWITCH, TACTILE (FOCUS)	
S6115	1-692-679-21	SWITCH, TACTILE (DOWN)	
S6116	1-692-679-21	SWITCH, TACTILE (AUDIO MUTE)	
S6117	1-692-679-21	SWITCH, TACTILE (PIC SHIFT)	
S6118	1-692-679-21	SWITCH, TACTILE (UP)	
S6119	1-692-679-21	SWITCH, TACTILE (STAND BY)	
S6120	1-692-679-21	SWITCH, TACTILE (ZOOM)	
S6121	1-692-679-21	SWITCH, TACTILE (ENTER)	
S6122	1-692-679-21	SWITCH, TACTILE (ON)	
S6123	1-692-679-21	SWITCH, TACTILE (PATTERN)	
S6124	1-692-679-21	SWITCH, TACTILE (MENU)	

****

Ref.No.	Part No.	Description
	* A-1306-578-A	M COMPL **********************
	* X-4036-255-1	PANEL (M) ASSY, REAR
	* 1-526-659-00	SOCKET, IC (DP) 28P (IC 2206)
	* 1-526-662-21	SOCKET, IC (DP) 40P (IC 2208)
	* 1-540-212-11	SOCKET (ROTARY SWITCH)
	4-055-636-01	SCREW (S2), M3
	7-682-148-01	SCREW +P 3X8
	7-682-247-09	SCREW +K 3X6
	7-682-548-09	SCREW +B 3X8
	7-685-647-79	SCREW +BVTP 3X10 TYPE2 IT-3
	8-752-907-98	IC CXP84648-057Q

<CAPACITOR>

Ref.No.	Part No.	Description			Remark
C2001	1-128-401-11	ELECT CHIP	100MF	20%	25V
C2002	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C2003	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C2004	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C2005	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C2006	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C2007	1-128-401-11	ELECT CHIP	100MF	20%	25V
C2008	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C2009	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C2010	1-128-401-11	ELECT CHIP	100MF	20%	25V
C2011	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C2012	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C2013	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C2014	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C2015	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C2016	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C2017	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C2018	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C2019	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C2020	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C2023	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C2024	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C2026	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C2027	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C2028	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C2029	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C2201	1-107-823-11	CERAMIC CHIP	0.47MF	10%	16V
C2202	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V

Ref.No.	Part No.	Description			Remark
C2203	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C2204	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C2205	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C2206	1-163-133-00	CERAMIC CHIP	470PF	5%	50V
C2207	1-163-009-11	CERAMIC CHIP	0.001MF	10%	50V
C2208	1-163-233-11	CERAMIC CHIP	18PF	5%	50V
C2209	1-163-233-11	CERAMIC CHIP	18PF	5%	50V
C2210	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C2211	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C2212	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C2213	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C2214	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C2215	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C2216	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C2217	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C2218	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C2219	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C2222	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C2301	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C2302	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C2303	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C2304	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C2305	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C2306	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C2307	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C2308	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C2309	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C2310	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C2311	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C2316	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C2317	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C2318	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C2321	1-163-231-11	CERAMIC CHIP	15PF	5%	50V
C2322	1-163-231-11	CERAMIC CHIP	15PF	5%	50V
C2323	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C2324	1-163-133-00	CERAMIC CHIP	470PF	5%	50V
C2325	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C2326	1-163-009-11	CERAMIC CHIP	0.001MF	10%	50V
C2401	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C2402	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C2403	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C2404	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C2405	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C2406	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C2407	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C2408	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C2409	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C2410	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C2411	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C2412	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C2413	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C2414	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C2501	1-163-121-00	CERAMIC CHIP	150PF	5%	50V
C2503	1-163-121-00	CERAMIC CHIP	150PF	5%	50V
C2505	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C2507	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C2508	1-126-193-11	ELECT CHIP	1MF	20%	50V
C2509	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C2513	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C2514	1-128-401-11	ELECT CHIP	100MF	20%	25V
C2515	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C2517	1-104-607-11	ELECT CHIP	47MF	20%	16V
C2518	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C2519	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C2520	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C2521	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C2522	1-104-607-11	ELECT CHIP	47MF	20%	16V
C2523	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C2524	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C2525	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C2526	1-124-779-00	ELECT CHIP	10MF	20%	16V
C2527	1-128-401-11	ELECT CHIP	100MF	20%	25V
C2528	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C2529	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C2530	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C2531	1-104-607-11	ELECT CHIP	47MF	20%	16V
C2532	1-163-009-11	CERAMIC CHIP	0.001MF	10%	50V
C2601	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C2605	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C2606	1-104-607-11	ELECT CHIP	47MF	20%	16V
C2609	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C2611	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C2612	1-104-607-11	ELECT CHIP	47MF	20%	16V
C2613	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C2614	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C2615	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C2616	1-104-607-11	ELECT CHIP	47MF	20%	16V
C2617	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C2618	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C2619	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C2703	1-163-009-11	CERAMIC CHIP	0.001MF	10%	50V
C2704	1-163-009-11	CERAMIC CHIP	0.001MF	10%	50V
C2705	1-163-009-11	CERAMIC CHIP	0.001MF	10%	50V
C2706	1-163-009-11	CERAMIC CHIP	0.001MF	10%	50V
C2707	1-163-009-11	CERAMIC CHIP	0.001MF	10%	50V
C2708	1-163-009-11	CERAMIC CHIP	0.001MF	10%	50V
C2709	1-163-009-11	CERAMIC CHIP	0.001MF	10%	50V
C2710	1-163-009-11	CERAMIC CHIP	0.001MF	10%	50V
C2711	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C2712	1-163-231-11	CERAMIC CHIP	15PF	5%	50V
C2713	1-163-231-11	CERAMIC CHIP	15PF	5%	50V
C2714	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C2901	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C2902	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C2903	1-163-231-11	CERAMIC CHIP	15PF	5%	50V
C2904	1-163-231-11	CERAMIC CHIP	15PF	5%	50V
C2905	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C2906	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C2907	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C2908	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C2910	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C2911	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C2913	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C2914	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C2915	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C2916	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C2917	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C2918	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C2919	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C2920	1-163-243-11	CERAMIC CHIP	47PF	5%	50V
C2921	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C2922	1-126-193-11	ELECT CHIP	1MF	20%	50V
C2924	1-163-009-11	CERAMIC CHIP	0.001MF	10%	50V
C2926	1-163-009-11	CERAMIC CHIP	0.001MF	10%	50V
C2927	1-126-193-11	ELECT CHIP	1MF	20%	50V
C2929	1-163-009-11	CERAMIC CHIP	0.001MF	10%	50V
C2930	1-163-009-11	CERAMIC CHIP	0.001MF	10%	50V
C2932	1-163-009-11	CERAMIC CHIP	0.001MF	10%	50V
C2933	1-163-009-11	CERAMIC CHIP	0.001MF	10%	50V
C2934	1-163-009-11	CERAMIC CHIP	0.001MF	10%	50V
C2935	1-163-009-11	CERAMIC CHIP	0.001MF	10%	50V
C2936	1-163-009-11	CERAMIC CHIP	0.001MF	10%	50V

Ref.No.	Part No.	Description	Remark
	<CONNECTOR>		
CN2501	* 1-691-551-11	PIN, CONNECTOR (SMD) 8P	
CN2601	* 1-691-551-11	PIN, CONNECTOR (SMD) 8P	
	<DIODE>		
D2001	8-719-914-43	DIODE DAN202K	
D2002	8-719-914-43	DIODE DAN202K	
D2003	8-719-914-43	DIODE DAN202K	
D2004	8-719-914-43	DIODE DAN202K	
D2005	8-719-914-43	DIODE DAN202K	
D2006	8-719-914-43	DIODE DAN202K	
D2007	8-719-914-43	DIODE DAN202K	
D2008	8-719-914-43	DIODE DAN202K	
D2701	8-719-158-17	DIODE RD5.6SB2	
D2702	8-719-158-17	DIODE RD5.6SB2	
D2703	8-719-158-17	DIODE RD5.6SB2	
D2704	8-719-158-17	DIODE RD5.6SB2	
D2705	8-719-158-17	DIODE RD5.6SB2	
D2706	8-719-158-17	DIODE RD5.6SB2	
D2707	8-719-158-17	DIODE RD5.6SB2	
D2708	8-719-158-17	DIODE RD5.6SB2	
D2902	8-719-914-43	DIODE DAN202K	
D2903	8-719-914-43	DIODE DAN202K	
D2904	8-719-914-43	DIODE DAN202K	
D2905	8-719-158-17	DIODE RD5.6SB2	
D2906	8-719-914-43	DIODE DAN202K	
D2907	8-719-800-76	DIODE 1SS226	
D2908	8-719-800-76	DIODE 1SS226	
D2909	8-719-800-76	DIODE 1SS226	
D2911	8-719-158-53	DIODE RD13SB2	
D2913	8-719-914-43	DIODE DAN202K	
D2914	8-719-800-76	DIODE 1SS226	
D2915	8-719-800-76	DIODE 1SS226	
D2916	8-719-800-76	DIODE 1SS226	
D2917	8-719-800-76	DIODE 1SS226	
	<FILTER>		
FL2001	1-239-466-21	FILTER, EMI	
FL2002	1-239-466-21	FILTER, EMI	
	<IC>		
IC2001	8-759-186-77	IC TC74VHC541F	
IC2002	8-759-186-77	IC TC74VHC541F	
IC2003	8-759-186-77	IC TC74VHC541F	
IC2004	8-759-186-77	IC TC74VHC541F	
IC2005	8-759-491-41	IC TC74VHCT541AF(EL)	
IC2006	8-759-186-26	IC TC74VHC02F	
IC2007	8-759-186-77	IC TC74VHC541F	
IC2008	8-759-186-63	IC TC74VHC245F	
IC2010	8-759-439-28	IC TC7SH32F-TE85L	
IC2011	8-759-271-86	IC TC7SH04FU	
IC2012	8-759-186-43	IC TC74VHC123AF	
IC2201	8-759-162-80	IC MM1170BFB	
IC2202	8-759-568-63	IC HD6437043AE65F	
IC2203	8-759-543-74	IC CY7C1021-20ZC	
IC2206	8-759-530-40	IC M48Z35Y-70PC1	
IC2207	8-759-537-83	IC MBM29F400BC-70PFTN	
IC2209	* 8-759-545-62	IC M27C4002-10F1-SX1647	
IC2211	8-759-081-48	IC TC74VHC08F	
IC2212	8-759-082-55	IC TC7W00FU	
IC2213	8-759-271-86	IC TC7SH04FU	
IC2214	8-759-242-68	IC TC7W32F	
IC2301	8-759-571-01	IC MBCG46104-120PFV	
IC2303	8-759-162-80	IC MM1170BFB	
IC2304	8-759-242-74	IC TC7W04F	
IC2401	8-759-174-16	IC TC74VHC244F	
IC2402	8-759-174-16	IC TC74VHC244F	
IC2403	8-759-174-16	IC TC74VHC244F	
IC2404	8-759-174-16	IC TC74VHC244F	
IC2405	8-759-174-16	IC TC74VHC244F	
IC2406	8-759-271-86	IC TC7SH04FU	
IC2407	8-759-271-86	IC TC7SH04FU	
IC2408	8-759-186-38	IC TC74VHC32F	
IC2409	8-759-186-63	IC TC74VHC245F	
IC2410	8-759-174-16	IC TC74VHC244F	
IC2411	8-759-174-16	IC TC74VHC244F	
IC2412	8-759-174-16	IC TC74VHC244F	
IC2413	8-759-537-83	IC MBM29F400BC-70PFTN	
IC2414	8-759-335-04	IC CY7C136-55JC	
IC2501	8-759-186-43	IC TC74VHC123AF	
IC2503	8-759-186-77	IC TC74VHC541F	
IC2504	8-759-186-77	IC TC74VHC541F	
IC2505	8-759-437-35	IC MB90091APF-116	
IC2506	8-759-186-77	IC TC74VHC541F	
IC2507	8-759-271-86	IC TC7SH04FU	
IC2508	8-759-186-63	IC TC74VHC245F	
IC2509	8-759-439-28	IC TC7SH32F-TE85L	
IC2510	8-759-460-74	IC BA05FP-E2	
IC2511	8-759-571-45	IC ISPLSI2032-80LT48-M01V1	
IC2601	8-759-430-23	IC UPD65806GD-064-LML	
IC2603	8-759-491-32	IC TC74VHCT04AF(EL)	
IC2604	8-759-447-77	IC TC7WH74FU(TE12R)	
IC2605	8-759-394-05	IC TC7SH08F-TE85R	
IC2607	8-759-575-94	IC TC551664BJ-15(EL)	
IC2608	8-759-575-94	IC TC551664BJ-15(EL)	
IC2611	8-759-571-44	IC ISPLSI1016E-80LT44-M02V1	
IC2703	8-752-908-87	IC CXP846P48Q-1-018	
IC2901	8-759-242-74	IC TC7W04F	
IC2902	8-759-479-15	IC PC16552DV	
IC2903	8-759-701-01	IC NJM2904M	
IC2904	8-759-271-86	IC TC7SH04FU	
IC2905	8-759-981-61	IC LM2901M	
IC2906	8-759-566-66	IC MAX3085CSA	
IC2907	8-759-566-66	IC MAX3085CSA	
IC2909	8-759-396-84	IC MAX211ECAI-TE2	
IC2910	8-759-397-00	IC MAX489ECSD-TE2	
IC2911	8-759-180-84	IC TC7W74F	
	<JACK>		
J2901	1-507-562-00	JACK (POWER ON TRIG)	
	<TRANSISTOR>		
Q2001	1-801-806-11	TRANSISTOR DTC144EKA-T14	
Q2002	1-801-806-11	TRANSISTOR DTC144EKA-T14	
Q2003	1-801-806-11	TRANSISTOR DTC144EKA-T14	
Q2004	1-801-806-11	TRANSISTOR DTC144EKA-T14	
Q2005	1-801-806-11	TRANSISTOR DTC144EKA-T14	
Q2006	1-801-806-11	TRANSISTOR DTC144EKA-T14	
Q2007	1-801-806-11	TRANSISTOR DTC144EKA-T14	
Q2008	1-801-806-11	TRANSISTOR DTC144EKA-T14	
Q2009	8-729-202-38	TRANSISTOR 2SC3326N-A	
Q2010	8-729-202-38	TRANSISTOR 2SC3326N-A	
Q2011	1-801-806-11	TRANSISTOR DTC144EKA-T14	
Q2012	1-801-806-11	TRANSISTOR DTC144EKA-T14	
Q2201	8-729-216-22	TRANSISTOR 2SA1162-G	
Q2202	1-801-806-11	TRANSISTOR DTC144EKA-T14	
Q2501	1-801-806-11	TRANSISTOR DTC144EKA-T14	

Ref.No.	Part No.	Description	Remark
Q2901	1-801-806-11	TRANSISTOR DTC144EKA-T146	
Q2902	8-729-216-22	TRANSISTOR 2SA1162-G	
Q2903	1-801-806-11	TRANSISTOR DTC144EKA-T146	
Q2904	1-801-806-11	TRANSISTOR DTC144EKA-T146	
Q2905	1-801-806-11	TRANSISTOR DTC144EKA-T146	
Q2906	1-801-806-11	TRANSISTOR DTC144EKA-T146	
Q2907	1-801-806-11	TRANSISTOR DTC144EKA-T146	
Q2908	8-729-014-93	TRANSISTOR 2SB1440S-TX	
Q2909	1-801-806-11	TRANSISTOR DTC144EKA-T146	
Q2910	1-801-806-11	TRANSISTOR DTC144EKA-T146	
Q2911	8-729-230-49	TRANSISTOR 2SC2712-YG	
Q2912	8-729-900-53	TRANSISTOR DTC114EK	
Q2913	8-729-900-53	TRANSISTOR DTC114EK	
Q2914	8-729-900-53	TRANSISTOR DTC114EK	
Q2915	8-729-900-53	TRANSISTOR DTC114EK	
	<RESISTOR>		
R2001	1-216-073-00	RES,CHIP 10K 5% 1/10W	
R2002	1-216-073-00	RES,CHIP 10K 5% 1/10W	
R2003	1-216-025-91	RES,CHIP 100 5% 1/10W	
R2004	1-216-025-91	RES,CHIP 100 5% 1/10W	
R2005	1-216-025-91	RES,CHIP 100 5% 1/10W	
R2006	1-216-295-91	SHORT 0	
R2007	1-216-295-91	SHORT 0	
R2008	1-216-025-91	RES,CHIP 100 5% 1/10W	
R2010	1-216-097-91	RES,CHIP 100K 5% 1/10W	
R2011	1-216-097-91	RES,CHIP 100K 5% 1/10W	
R2013	1-216-025-91	RES,CHIP 100 5% 1/10W	
R2014	1-216-073-00	RES,CHIP 10K 5% 1/10W	
R2015	1-216-073-00	RES,CHIP 10K 5% 1/10W	
R2016	1-216-025-91	RES,CHIP 100 5% 1/10W	
R2017	1-216-025-91	RES,CHIP 100 5% 1/10W	
R2018	1-216-073-00	RES,CHIP 10K 5% 1/10W	
R2019	1-216-073-00	RES,CHIP 10K 5% 1/10W	
R2020	1-216-073-00	RES,CHIP 10K 5% 1/10W	
R2021	1-216-073-00	RES,CHIP 10K 5% 1/10W	
R2026	1-216-025-91	RES,CHIP 100 5% 1/10W	
R2028	1-216-025-91	RES,CHIP 100 5% 1/10W	
R2029	1-216-025-91	RES,CHIP 100 5% 1/10W	
R2030	1-216-073-00	RES,CHIP 10K 5% 1/10W	
R2031	1-216-025-91	RES,CHIP 100 5% 1/10W	
R2032	1-216-025-91	RES,CHIP 100 5% 1/10W	
R2033	1-216-073-00	RES,CHIP 10K 5% 1/10W	
R2034	1-216-073-00	RES,CHIP 10K 5% 1/10W	
R2035	1-216-073-00	RES,CHIP 10K 5% 1/10W	
R2036	1-216-073-00	RES,CHIP 10K 5% 1/10W	
R2037	1-216-025-91	RES,CHIP 100 5% 1/10W	
R2038	1-216-057-00	RES,CHIP 2.2K 5% 1/10W	
R2039	1-216-025-91	RES,CHIP 100 5% 1/10W	
R2040	1-216-025-91	RES,CHIP 100 5% 1/10W	
R2041	1-216-073-00	RES,CHIP 10K 5% 1/10W	
R2042	1-216-025-91	RES,CHIP 100 5% 1/10W	
R2043	1-216-025-91	RES,CHIP 100 5% 1/10W	
R2044	1-216-025-91	RES,CHIP 100 5% 1/10W	
R2045	1-216-073-00	RES,CHIP 10K 5% 1/10W	
R2046	1-216-049-91	RES,CHIP 1K 5% 1/10W	
R2047	1-216-025-91	RES,CHIP 100 5% 1/10W	
R2049	1-216-025-91	RES,CHIP 100 5% 1/10W	
R2050	1-216-025-91	RES,CHIP 100 5% 1/10W	
R2051	1-216-025-91	RES,CHIP 100 5% 1/10W	
R2052	1-216-073-00	RES,CHIP 10K 5% 1/10W	
R2053	1-216-025-91	RES,CHIP 100 5% 1/10W	
R2054	1-216-025-91	RES,CHIP 100 5% 1/10W	
R2055	1-216-073-00	RES,CHIP 10K 5% 1/10W	
R2056	1-216-073-00	RES,CHIP 10K 5% 1/10W	
R2057	1-216-073-00	RES,CHIP. 10K 5% 1/10W	

Ref.No.	Part No.	Description	Remark
R2058	1-216-073-00	RES,CHIP 10K 5% 1/10W	
R2059	1-216-073-00	RES,CHIP 10K 5% 1/10W	
R2060	1-216-073-00	RES,CHIP 10K 5% 1/10W	
R2061	1-216-073-00	RES,CHIP 10K 5% 1/10W	
R2062	1-216-073-00	RES,CHIP 10K 5% 1/10W	
R2063	1-216-073-00	RES,CHIP 10K 5% 1/10W	
R2065	1-216-025-91	RES,CHIP 100 5% 1/10W	
R2066	1-216-073-00	RES,CHIP 10K 5% 1/10W	
R2067	1-216-025-91	RES,CHIP 100 5% 1/10W	
R2068	1-216-025-91	RES,CHIP 100 5% 1/10W	
R2069	1-216-025-91	RES,CHIP 100 5% 1/10W	
R2070	1-216-073-00	RES,CHIP 10K 5% 1/10W	
R2071	1-216-025-91	RES,CHIP 100 5% 1/10W	
R2072	1-216-025-91	RES,CHIP 100 5% 1/10W	
R2073	1-216-025-91	RES,CHIP 100 5% 1/10W	
R2074	1-216-025-91	RES,CHIP 100 5% 1/10W	
R2075	1-216-025-91	RES,CHIP 100 5% 1/10W	
R2076	1-216-073-00	RES,CHIP 10K 5% 1/10W	
R2077	1-216-089-91	RES,CHIP 47K 5% 1/10W	
R2078	1-216-073-00	RES,CHIP 10K 5% 1/10W	
R2079	1-216-073-00	RES,CHIP 10K 5% 1/10W	
R2080	1-216-073-00	RES,CHIP 10K 5% 1/10W	
R2081	1-216-089-91	RES,CHIP 47K 5% 1/10W	
R2082	1-216-073-00	RES,CHIP 10K 5% 1/10W	
R2083	1-216-073-00	RES,CHIP 10K 5% 1/10W	
R2084	1-216-073-00	RES,CHIP 10K 5% 1/10W	
R2085	1-216-073-00	RES,CHIP 10K 5% 1/10W	
R2086	1-216-025-91	RES,CHIP 100 5% 1/10W	
R2087	1-216-097-91	RES,CHIP 100K 5% 1/10W	
R2088	1-216-025-91	RES,CHIP 100 5% 1/10W	
R2089	1-216-025-91	RES,CHIP 100 5% 1/10W	
R2090	1-216-295-91	SHORT 0	
R2091	1-216-025-91	RES,CHIP 100 5% 1/10W	
R2092	1-216-073-00	RES,CHIP 10K 5% 1/10W	
R2093	1-216-025-91	RES,CHIP 100 5% 1/10W	
R2094	1-216-025-91	RES,CHIP 100 5% 1/10W	
R2095	1-216-025-91	RES,CHIP 100 5% 1/10W	
R2096	1-216-025-91	RES,CHIP 100 5% 1/10W	
R2097	1-216-025-91	RES,CHIP 100 5% 1/10W	
R2098	1-216-073-00	RES,CHIP 10K 5% 1/10W	
R2099	1-216-025-91	RES,CHIP 100 5% 1/10W	
R2100	1-216-025-91	RES,CHIP 100 5% 1/10W	
R2101	1-216-073-00	RES,CHIP 10K 5% 1/10W	
R2102	1-216-073-00	RES,CHIP 10K 5% 1/10W	
R2103	1-216-025-91	RES,CHIP 100 5% 1/10W	
R2104	1-216-025-91	RES,CHIP 100 5% 1/10W	
R2105	1-216-009-91	RES,CHIP 22 5% 1/10W	
R2106	1-216-025-91	RES,CHIP 100 5% 1/10W	
R2107	1-216-025-91	RES,CHIP 100 5% 1/10W	
R2108	1-216-025-91	RES,CHIP 100 5% 1/10W	
R2109	1-216-025-91	RES,CHIP 100 5% 1/10W	
R2110	1-216-073-00	RES,CHIP 10K 5% 1/10W	
R2111	1-216-025-91	RES,CHIP 100 5% 1/10W	
R2112	1-216-025-91	RES,CHIP 100 5% 1/10W	
R2113	1-216-025-91	RES,CHIP 100 5% 1/10W	
R2114	1-216-025-91	RES,CHIP 100 5% 1/10W	
R2115	1-216-025-91	RES,CHIP 100 5% 1/10W	
R2116	1-216-025-91	RES,CHIP 100 5% 1/10W	
R2117	1-216-025-91	RES,CHIP 100 5% 1/10W	
R2118	1-216-025-91	RES,CHIP 100 5% 1/10W	
R2119	1-216-025-91	RES,CHIP 100 5% 1/10W	
R2120	1-216-025-91	RES,CHIP 100 5% 1/10W	
R2121	1-216-073-00	RES,CHIP 10K 5% 1/10W	
R2122	1-216-073-00	RES,CHIP 10K 5% 1/10W	
R2123	1-216-025-91	RES,CHIP 100 5% 1/10W	
R2124	1-216-025-91	RES,CHIP 100 5% 1/10W	

Ref.No.	Part No.	Description			Remark
R2125	1-216-025-91	RES,CHIP	100	5%	1/10W
R2126	1-216-025-91	RES,CHIP	100	5%	1/10W
R2127	1-216-025-91	RES,CHIP	100	5%	1/10W
R2128	1-216-025-91	RES,CHIP	100	5%	1/10W
R2129	1-216-025-91	RES,CHIP	100	5%	1/10W
R2130	1-216-025-91	RES,CHIP	100	5%	1/10W
R2131	1-216-025-91	RES,CHIP	100	5%	1/10W
R2132	1-216-025-91	RES,CHIP	100	5%	1/10W
R2133	1-216-073-00	RES,CHIP	10K	5%	1/10W
R2134	1-216-025-91	RES,CHIP	100	5%	1/10W
R2135	1-216-025-91	RES,CHIP	100	5%	1/10W
R2136	1-216-073-00	RES,CHIP	10K	5%	1/10W
R2137	1-216-025-91	RES,CHIP	100	5%	1/10W
R2138	1-216-025-91	RES,CHIP	100	5%	1/10W
R2142	1-216-073-00	RES,CHIP	10K	5%	1/10W
R2143	1-216-073-00	RES,CHIP	10K	5%	1/10W
R2144	1-216-025-91	RES,CHIP	100	5%	1/10W
R2145	1-216-025-91	RES,CHIP	100	5%	1/10W
R2146	1-216-025-91	RES,CHIP	100	5%	1/10W
R2147	1-216-073-00	RES,CHIP	10K	5%	1/10W
R2148	1-216-025-91	RES,CHIP	100	5%	1/10W
R2149	1-216-025-91	RES,CHIP	100	5%	1/10W
R2150	1-216-025-91	RES,CHIP	100	5%	1/10W
R2151	1-216-073-00	RES,CHIP	10K	5%	1/10W
R2152	1-216-025-91	RES,CHIP	100	5%	1/10W
R2153	1-216-025-91	RES,CHIP	100	5%	1/10W
R2154	1-216-073-00	RES,CHIP	10K	5%	1/10W
R2155	1-216-073-00	RES,CHIP	10K	5%	1/10W
R2156	1-216-047-91	RES,CHIP	820	5%	1/10W
R2157	1-216-073-00	RES,CHIP	10K	5%	1/10W
R2158	1-216-025-91	RES,CHIP	100	5%	1/10W
R2159	1-216-047-91	RES,CHIP	820	5%	1/10W
R2160	1-216-025-91	RES,CHIP	100	5%	1/10W
R2161	1-216-047-91	RES,CHIP	820	5%	1/10W
R2162	1-216-025-91	RES,CHIP	100	5%	1/10W
R2163	1-216-047-91	RES,CHIP	820	5%	1/10W
R2164	1-216-025-91	RES,CHIP	100	5%	1/10W
R2165	1-216-047-91	RES,CHIP	820	5%	1/10W
R2166	1-216-025-91	RES,CHIP	100	5%	1/10W
R2167	1-216-025-91	RES,CHIP	100	5%	1/10W
R2168	1-216-025-91	RES,CHIP	100	5%	1/10W
R2169	1-216-025-91	RES,CHIP	100	5%	1/10W
R2170	1-216-073-00	RES,CHIP	10K	5%	1/10W
R2171	1-216-073-00	RES,CHIP	10K	5%	1/10W
R2172	1-216-025-91	RES,CHIP	100	5%	1/10W
R2173	1-216-025-91	RES,CHIP	100	5%	1/10W
R2174	1-216-025-91	RES,CHIP	100	5%	1/10W
R2175	1-216-025-91	RES,CHIP	100	5%	1/10W
R2176	1-216-025-91	RES,CHIP	100	5%	1/10W
R2177	1-216-025-91	RES,CHIP	100	5%	1/10W
R2178	1-216-025-91	RES,CHIP	100	5%	1/10W
R2179	1-216-025-91	RES,CHIP	100	5%	1/10W
R2180	1-216-073-00	RES,CHIP	10K	5%	1/10W
R2181	1-216-073-00	RES,CHIP	10K	5%	1/10W
R2182	1-216-073-00	RES,CHIP	10K	5%	1/10W
R2183	1-216-073-00	RES,CHIP	10K	5%	1/10W
R2184	1-216-073-00	RES,CHIP	10K	5%	1/10W
R2185	1-216-025-91	RES,CHIP	100	5%	1/10W
R2186	1-216-025-91	RES,CHIP	100	5%	1/10W
R2187	1-216-025-91	RES,CHIP	100	5%	1/10W
R2188	1-216-025-91	RES,CHIP	100	5%	1/10W
R2189	1-216-295-91	SHORT	0		
R2192	1-216-025-91	RES,CHIP	100	5%	1/10W
R2193	1-216-025-91	RES,CHIP	100	5%	1/10W
R2194	1-216-025-91	RES,CHIP	100	5%	1/10W
R2195	1-216-025-91	RES,CHIP	100	5%	1/10W

Ref.No.	Part No.	Description			Remark
R2196	1-216-025-91	RES,CHIP	100	5%	1/10W
R2197	1-216-025-91	RES,CHIP	100	5%	1/10W
R2198	1-216-073-00	RES,CHIP	10K	5%	1/10W
R2199	1-216-025-91	RES,CHIP	100	5%	1/10W
R2200	1-216-295-91	SHORT	0		
R2201	1-216-295-91	SHORT	0		
R2202	1-216-295-91	SHORT	0		
R2203	1-216-295-91	SHORT	0		
R2206	1-216-295-91	SHORT	0		
R2207	1-216-295-91	SHORT	0		
R2208	1-216-295-91	SHORT	0		
R2209	1-216-295-91	SHORT	0		
R2210	1-216-295-91	SHORT	0		
R2211	1-216-295-91	SHORT	0		
R2212	1-216-295-91	SHORT	0		
R2213	1-216-295-91	SHORT	0		
R2214	1-216-295-91	SHORT	0		
R2215	1-216-295-91	SHORT	0		
R2216	1-216-295-91	SHORT	0		
R2217	1-216-073-00	RES,CHIP	10K	5%	1/10W
R2218	1-216-073-00	RES,CHIP	10K	5%	1/10W
R2219	1-216-073-00	RES,CHIP	10K	5%	1/10W
R2220	1-216-033-00	RES,CHIP	220	5%	1/10W
R2221	1-216-025-91	RES,CHIP	100	5%	1/10W
R2222	1-216-025-91	RES,CHIP	100	5%	1/10W
R2223	1-216-025-91	RES,CHIP	100	5%	1/10W
R2224	1-216-025-91	RES,CHIP	100	5%	1/10W
R2225	1-216-025-91	RES,CHIP	100	5%	1/10W
R2229	1-216-025-91	RES,CHIP	100	5%	1/10W
R2230	1-216-025-91	RES,CHIP	100	5%	1/10W
R2231	1-216-025-91	RES,CHIP	100	5%	1/10W
R2232	1-216-025-91	RES,CHIP	100	5%	1/10W
R2233	1-216-025-91	RES,CHIP	100	5%	1/10W
R2234	1-216-025-91	RES,CHIP	100	5%	1/10W
R2238	1-216-025-91	RES,CHIP	100	5%	1/10W
R2239	1-216-025-91	RES,CHIP	100	5%	1/10W
R2240	1-216-025-91	RES,CHIP	100	5%	1/10W
R2241	1-216-025-91	RES,CHIP	100	5%	1/10W
R2242	1-216-073-00	RES,CHIP	10K	5%	1/10W
R2243	1-216-025-91	RES,CHIP	100	5%	1/10W
R2244	1-216-025-91	RES,CHIP	100	5%	1/10W
R2246	1-216-059-00	RES,CHIP	2.7K	5%	1/10W
R2247	1-216-025-91	RES,CHIP	100	5%	1/10W
R2248	1-216-033-00	RES,CHIP	220	5%	1/10W
R2250	1-216-113-00	RES,CHIP	470K	5%	1/10W
R2252	1-216-073-00	RES,CHIP	10K	5%	1/10W
R2253	1-216-113-00	RES,CHIP	470K	5%	1/10W
R2254	1-216-073-00	RES,CHIP	10K	5%	1/10W
R2255	1-216-073-00	RES,CHIP	10K	5%	1/10W
R2256	1-216-073-00	RES,CHIP	10K	5%	1/10W
R2261	1-216-073-00	RES,CHIP	10K	5%	1/10W
R2264	1-216-073-00	RES,CHIP	10K	5%	1/10W
R2265	1-216-025-91	RES,CHIP	100	5%	1/10W
R2266	1-216-025-91	RES,CHIP	100	5%	1/10W
R2267	1-216-025-91	RES,CHIP	100	5%	1/10W
R2268	1-216-025-91	RES,CHIP	100	5%	1/10W
R2269	1-216-025-91	RES,CHIP	100	5%	1/10W
R2270	1-216-025-91	RES,CHIP	100	5%	1/10W
R2271	1-216-025-91	RES,CHIP	100	5%	1/10W
R2272	1-216-073-00	RES,CHIP	10K	5%	1/10W
R2273	1-216-073-00	RES,CHIP	10K	5%	1/10W
R2274	1-216-295-91	SHORT	0		
R2275	1-216-025-91	RES,CHIP	100	5%	1/10W
R2276	1-216-113-00	RES,CHIP	470K	5%	1/10W
R2278	1-216-025-91	RES,CHIP	100	5%	1/10W
R2279	1-216-025-91	RES,CHIP	100	5%	1/10W

Ref.No.	Part No.	Description				Remark
R2280	1-216-025-91	RES,CHIP	100	5%	1/10W	
R2281	1-216-073-00	RES,CHIP	10K	5%	1/10W	
R2282	1-216-073-00	RES,CHIP	10K	5%	1/10W	
R2285	1-216-295-91	SHORT	0			
R2286	1-216-295-91	SHORT	0			
R2287	1-216-295-91	SHORT	0			
R2288	1-216-295-91	SHORT	0			
R2289	1-216-025-91	RES,CHIP	100	5%	1/10W	
R2290	1-216-073-00	RES,CHIP	10K	5%	1/10W	
R2291	1-216-073-00	RES,CHIP	10K	5%	1/10W	
R2292	1-216-025-91	RES,CHIP	100	5%	1/10W	
R2293	1-216-295-91	SHORT	0			
R2294	1-216-025-91	RES,CHIP	100	5%	1/10W	
R2295	1-216-049-91	RES,CHIP	1K	5%	1/10W	
R2296	1-216-073-00	RES,CHIP	10K	5%	1/10W	
R2297	1-216-073-00	RES,CHIP	10K	5%	1/10W	
R2301	1-216-073-00	RES,CHIP	10K	5%	1/10W	
R2302	1-216-073-00	RES,CHIP	10K	5%	1/10W	
R2303	1-216-073-00	RES,CHIP	10K	5%	1/10W	
R2304	1-216-073-00	RES,CHIP	10K	5%	1/10W	
R2305	1-216-073-00	RES,CHIP	10K	5%	1/10W	
R2306	1-216-025-91	RES,CHIP	100	5%	1/10W	
R2307	1-216-073-00	RES,CHIP	10K	5%	1/10W	
R2308	1-216-073-00	RES,CHIP	10K	5%	1/10W	
R2309	1-216-073-00	RES,CHIP	10K	5%	1/10W	
R2310	1-216-073-00	RES,CHIP	10K	5%	1/10W	
R2311	1-216-073-00	RES,CHIP	10K	5%	1/10W	
R2312	1-216-025-91	RES,CHIP	100	5%	1/10W	
R2313	1-216-073-00	RES,CHIP	10K	5%	1/10W	
R2314	1-216-073-00	RES,CHIP	10K	5%	1/10W	
R2315	1-216-073-00	RES,CHIP	10K	5%	1/10W	
R2316	1-216-073-00	RES,CHIP	10K	5%	1/10W	
R2317	1-216-073-00	RES,CHIP	10K	5%	1/10W	
R2318	1-216-073-00	RES,CHIP	10K	5%	1/10W	
R2319	1-216-025-91	RES,CHIP	100	5%	1/10W	
R2320	1-216-025-91	RES,CHIP	100	5%	1/10W	
R2321	1-216-025-91	RES,CHIP	100	5%	1/10W	
R2322	1-216-025-91	RES,CHIP	100	5%	1/10W	
R2323	1-216-025-91	RES,CHIP	100	5%	1/10W	
R2324	1-216-025-91	RES,CHIP	100	5%	1/10W	
R2325	1-216-025-91	RES,CHIP	100	5%	1/10W	
R2326	1-216-073-00	RES,CHIP	10K	5%	1/10W	
R2327	1-216-073-00	RES,CHIP	10K	5%	1/10W	
R2331	1-216-121-91	RES,CHIP	1M	5%	1/10W	
R2332	1-216-073-00	RES,CHIP	10K	5%	1/10W	
R2333	1-216-073-00	RES,CHIP	10K	5%	1/10W	
R2334	1-216-295-91	SHORT	0			
R2335	1-216-025-91	RES,CHIP	100	5%	1/10W	
R2336	1-216-025-91	RES,CHIP	100	5%	1/10W	
R2337	1-216-025-91	RES,CHIP	100	5%	1/10W	
R2338	1-216-025-91	RES,CHIP	100	5%	1/10W	
R2343	1-216-073-00	RES,CHIP	10K	5%	1/10W	
R2344	1-216-073-00	RES,CHIP	10K	5%	1/10W	
R2345	1-216-073-00	RES,CHIP	10K	5%	1/10W	
R2346	1-216-073-00	RES,CHIP	10K	5%	1/10W	
R2347	1-216-025-91	RES,CHIP	100	5%	1/10W	
R2348	1-216-025-91	RES,CHIP	100	5%	1/10W	
R2351	1-216-073-00	RES,CHIP	10K	5%	1/10W	
R2352	1-216-073-00	RES,CHIP	10K	5%	1/10W	
R2353	1-216-073-00	RES,CHIP	10K	5%	1/10W	
R2354	1-216-073-00	RES,CHIP	10K	5%	1/10W	
R2355	1-216-073-00	RES,CHIP	10K	5%	1/10W	
R2356	1-216-073-00	RES,CHIP	10K	5%	1/10W	
R2357	1-216-073-00	RES,CHIP	10K	5%	1/10W	
R2358	1-216-073-00	RES,CHIP	10K	5%	1/10W	
R2359	1-216-073-00	RES,CHIP	10K	5%	1/10W	
R2360	1-216-073-00	RES,CHIP	10K	5%	1/10W	
R2361	1-216-073-00	RES,CHIP	10K	5%	1/10W	
R2362	1-216-073-00	RES,CHIP	10K	5%	1/10W	
R2363	1-216-073-00	RES,CHIP	10K	5%	1/10W	
R2364	1-216-073-00	RES,CHIP	10K	5%	1/10W	
R2365	1-216-073-00	RES,CHIP	10K	5%	1/10W	
R2366	1-216-073-00	RES,CHIP	10K	5%	1/10W	
R2367	1-216-073-00	RES,CHIP	10K	5%	1/10W	
R2368	1-216-073-00	RES,CHIP	10K	5%	1/10W	
R2369	1-216-073-00	RES,CHIP	10K	5%	1/10W	
R2370	1-216-073-00	RES,CHIP	10K	5%	1/10W	
R2371	1-216-073-00	RES,CHIP	10K	5%	1/10W	
R2372	1-216-097-91	RES,CHIP	100K	5%	1/10W	
R2373	1-216-073-00	RES,CHIP	10K	5%	1/10W	
R2374	1-216-073-00	RES,CHIP	10K	5%	1/10W	
R2375	1-216-073-00	RES,CHIP	10K	5%	1/10W	
R2376	1-216-295-91	SHORT	0			
R2377	1-216-049-91	RES,CHIP	1K	5%	1/10W	
R2378	1-216-073-00	RES,CHIP	10K	5%	1/10W	
R2379	1-216-073-00	RES,CHIP	10K	5%	1/10W	
R2380	1-216-073-00	RES,CHIP	10K	5%	1/10W	
R2381	1-216-073-00	RES,CHIP	10K	5%	1/10W	
R2382	1-216-073-00	RES,CHIP	10K	5%	1/10W	
R2383	1-216-073-00	RES,CHIP	10K	5%	1/10W	
R2384	1-216-073-00	RES,CHIP	10K	5%	1/10W	
R2385	1-216-073-00	RES,CHIP	10K	5%	1/10W	
R2386	1-216-073-00	RES,CHIP	10K	5%	1/10W	
R2387	1-216-073-00	RES,CHIP	10K	5%	1/10W	
R2388	1-216-073-00	RES,CHIP	10K	5%	1/10W	
R2389	1-216-073-00	RES,CHIP	10K	5%	1/10W	
R2390	1-216-025-91	RES,CHIP	100	5%	1/10W	
R2402	1-216-295-91	SHORT	0			
R2403	1-216-073-00	RES,CHIP	10K	5%	1/10W	
R2404	1-216-073-00	RES,CHIP	10K	5%	1/10W	
R2407	1-216-073-00	RES,CHIP	10K	5%	1/10W	
R2408	1-216-073-00	RES,CHIP	10K	5%	1/10W	
R2409	1-216-073-00	RES,CHIP	10K	5%	1/10W	
R2410	1-216-073-00	RES,CHIP	10K	5%	1/10W	
R2411	1-216-073-00	RES,CHIP	10K	5%	1/10W	
R2421	1-216-295-91	SHORT	0			
R2422	1-216-073-00	RES,CHIP	10K	5%	1/10W	
R2501	1-216-025-91	RES,CHIP	100	5%	1/10W	
R2502	1-216-025-91	RES,CHIP	100	5%	1/10W	
R2503	1-216-073-00	RES,CHIP	10K	5%	1/10W	
R2504	1-216-073-00	RES,CHIP	10K	5%	1/10W	
R2505	1-216-073-00	RES,CHIP	10K	5%	1/10W	
R2506	1-216-073-00	RES,CHIP	10K	5%	1/10W	
R2510	1-216-073-00	RES,CHIP	10K	5%	1/10W	
R2511	1-216-073-00	RES,CHIP	10K	5%	1/10W	
R2515	1-216-025-91	RES,CHIP	100	5%	1/10W	
R2517	1-216-073-00	RES,CHIP	10K	5%	1/10W	
R2519	1-216-025-91	RES,CHIP	100	5%	1/10W	
R2520	1-216-025-91	RES,CHIP	100	5%	1/10W	
R2521	1-216-025-91	RES,CHIP	100	5%	1/10W	
R2522	1-216-025-91	RES,CHIP	100	5%	1/10W	
R2523	1-216-025-91	RES,CHIP	100	5%	1/10W	
R2524	1-216-073-00	RES,CHIP	10K	5%	1/10W	
R2525	1-216-025-91	RES,CHIP	100	5%	1/10W	
R2526	1-216-295-91	SHORT	0			
R2528	1-216-025-91	RES,CHIP	100	5%	1/10W	
R2529	1-216-295-91	SHORT	0			
R2530	1-216-029-00	RES,CHIP	150	5%	1/10W	
R2532	1-216-073-00	RES,CHIP	10K	5%	1/10W	
R2534	1-216-025-91	RES,CHIP	100	5%	1/10W	
R2535	1-216-025-91	RES,CHIP	100	5%	1/10W	
R2536	1-216-025-91	RES,CHIP	100	5%	1/10W	

Ref.No.	Part No.	Description			Remark
R2537	1-216-025-91	RES,CHIP	100	5%	1/10W
R2539	1-216-025-91	RES,CHIP	100	5%	1/10W
R2540	1-216-025-91	RES,CHIP	100	5%	1/10W
R2541	1-216-025-91	RES,CHIP	100	5%	1/10W
R2542	1-216-025-91	RES,CHIP	100	5%	1/10W
R2543	1-216-025-91	RES,CHIP	100	5%	1/10W
R2544	1-216-073-00	RES,CHIP	10K	5%	1/10W
R2545	1-216-073-00	RES,CHIP	10K	5%	1/10W
R2546	1-216-025-91	RES,CHIP	100	5%	1/10W
R2547	1-216-025-91	RES,CHIP	100	5%	1/10W
R2548	1-216-073-00	RES,CHIP	10K	5%	1/10W
R2549	1-216-073-00	RES,CHIP	10K	5%	1/10W
R2550	1-216-295-91	SHORT	0		
R2551	1-216-295-91	SHORT	0		
R2552	1-216-025-91	RES,CHIP	100	5%	1/10W
R2557	1-216-049-91	RES,CHIP	1K	5%	1/10W
R2558	1-216-049-91	RES,CHIP	1K	5%	1/10W
R2559	1-216-049-91	RES,CHIP	1K	5%	1/10W
R2560	1-216-049-91	RES,CHIP	1K	5%	1/10W
R2561	1-216-049-91	RES,CHIP	1K	5%	1/10W
R2562	1-216-049-91	RES,CHIP	1K	5%	1/10W
R2563	1-216-049-91	RES,CHIP	1K	5%	1/10W
R2564	1-216-049-91	RES,CHIP	1K	5%	1/10W
R2565	1-216-049-91	RES,CHIP	1K	5%	1/10W
R2566	1-216-049-91	RES,CHIP	1K	5%	1/10W
R2567	1-216-049-91	RES,CHIP	1K	5%	1/10W
R2568	1-216-049-91	RES,CHIP	1K	5%	1/10W
R2569	1-216-049-91	RES,CHIP	1K	5%	1/10W
R2570	1-216-049-91	RES,CHIP	1K	5%	1/10W
R2571	1-216-049-91	RES,CHIP	1K	5%	1/10W
R2572	1-216-049-91	RES,CHIP	1K	5%	1/10W
R2573	1-216-049-91	RES,CHIP	1K	5%	1/10W
R2574	1-216-049-91	RES,CHIP	1K	5%	1/10W
R2575	1-216-049-91	RES,CHIP	1K	5%	1/10W
R2576	1-216-049-91	RES,CHIP	1K	5%	1/10W
R2577	1-216-049-91	RES,CHIP	1K	5%	1/10W
R2578	1-216-049-91	RES,CHIP	1K	5%	1/10W
R2579	1-216-049-91	RES,CHIP	1K	5%	1/10W
R2580	1-216-049-91	RES,CHIP	1K	5%	1/10W
R2581	1-216-295-91	SHORT	0		
R2582	1-216-073-00	RES,CHIP	10K	5%	1/10W
R2601	1-216-295-91	SHORT	0		
R2604	1-216-295-91	SHORT	0		
R2605	1-216-295-91	SHORT	0		
R2606	1-216-295-91	SHORT	0		
R2607	1-216-073-00	RES,CHIP	10K	5%	1/10W
R2608	1-216-073-00	RES,CHIP	10K	5%	1/10W
R2609	1-216-295-91	SHORT	0		
R2610	1-216-295-91	SHORT	0		
R2611	1-216-295-91	SHORT	0		
R2612	1-216-295-91	SHORT	0		
R2613	1-216-295-91	SHORT	0		
R2614	1-216-295-91	SHORT	0		
R2615	1-216-295-91	SHORT	0		
R2616	1-216-295-91	SHORT	0		
R2617	1-216-295-91	SHORT	0		
R2618	1-216-295-91	SHORT	0		
R2619	1-216-295-91	SHORT	0		
R2620	1-216-295-91	SHORT	0		
R2621	1-216-295-91	SHORT	0		
R2622	1-216-295-91	SHORT	0		
R2623	1-216-295-91	SHORT	0		
R2624	1-216-295-91	SHORT	0		
R2625	1-216-295-91	SHORT	0		
R2626	1-216-295-91	SHORT	0		
R2627	1-216-295-91	SHORT	0		
R2628	1-216-295-91	SHORT	0		
R2629	1-216-295-91	SHORT	0		
R2630	1-216-073-00	RES,CHIP	10K	5%	1/10W
R2632	1-216-073-00	RES,CHIP	10K	5%	1/10W
R2633	1-216-295-91	SHORT	0		
R2634	1-216-073-00	RES,CHIP	10K	5%	1/10W
R2635	1-216-073-00	RES,CHIP	10K	5%	1/10W
R2636	1-216-073-00	RES,CHIP	10K	5%	1/10W
R2637	1-216-295-91	SHORT	0		
R2640	1-216-295-91	SHORT	0		
R2641	1-216-295-91	SHORT	0		
R2643	1-216-295-91	SHORT	0		
R2646	1-216-295-91	SHORT	0		
R2653	1-216-049-91	RES,CHIP	1K	5%	1/10W
R2654	1-216-295-91	SHORT	0		
R2660	1-216-073-00	RES,CHIP	10K	5%	1/10W
R2661	1-216-049-91	RES,CHIP	1K	5%	1/10W
R2662	1-216-049-91	RES,CHIP	1K	5%	1/10W
R2663	1-216-049-91	RES,CHIP	1K	5%	1/10W
R2664	1-216-049-91	RES,CHIP	1K	5%	1/10W
R2665	1-216-049-91	RES,CHIP	1K	5%	1/10W
R2666	1-216-049-91	RES,CHIP	1K	5%	1/10W
R2667	1-216-295-91	SHORT	0		
R2668	1-216-295-91	SHORT	0		
R2669	1-216-295-91	SHORT	0		
R2670	1-216-295-91	SHORT	0		
R2671	1-216-295-91	SHORT	0		
R2672	1-216-295-91	SHORT	0		
R2673	1-216-295-91	SHORT	0		
R2674	1-216-073-00	RES,CHIP	10K	5%	1/10W
R2702	1-216-025-91	RES,CHIP	100	5%	1/10W
R2703	1-216-025-91	RES,CHIP	100	5%	1/10W
R2709	1-216-025-91	RES,CHIP	100	5%	1/10W
R2710	1-216-025-91	RES,CHIP	100	5%	1/10W
R2711	1-216-025-91	RES,CHIP	100	5%	1/10W
R2712	1-216-025-91	RES,CHIP	100	5%	1/10W
R2713	1-216-025-91	RES,CHIP	100	5%	1/10W
R2714	1-216-025-91	RES,CHIP	100	5%	1/10W
R2715	1-216-025-91	RES,CHIP	100	5%	1/10W
R2716	1-216-025-91	RES,CHIP	100	5%	1/10W
R2718	1-216-025-91	RES,CHIP	100	5%	1/10W
R2719	1-216-025-91	RES,CHIP	100	5%	1/10W
R2720	1-216-073-00	RES,CHIP	10K	5%	1/10W
R2721	1-216-073-00	RES,CHIP	10K	5%	1/10W
R2722	1-216-073-00	RES,CHIP	10K	5%	1/10W
R2723	1-216-073-00	RES,CHIP	10K	5%	1/10W
R2724	1-216-073-00	RES,CHIP	10K	5%	1/10W
R2725	1-216-073-00	RES,CHIP	10K	5%	1/10W
R2726	1-216-073-00	RES,CHIP	10K	5%	1/10W
R2727	1-216-073-00	RES,CHIP	10K	5%	1/10W
R2728	1-216-025-91	RES,CHIP	100	5%	1/10W
R2729	1-216-295-91	SHORT	0		
R2730	1-216-295-91	SHORT	0		
R2731	1-216-295-91	SHORT	0		
R2736	1-216-073-00	RES,CHIP	10K	5%	1/10W
R2830	1-216-073-00	RES,CHIP	10K	5%	1/10W
R2833	1-216-073-00	RES,CHIP	10K	5%	1/10W
R2834	1-216-073-00	RES,CHIP	10K	5%	1/10W
R2851	1-216-049-91	RES,CHIP	1K	5%	1/10W
R2852	1-216-049-91	RES,CHIP	1K	5%	1/10W
R2901	1-216-025-91	RES,CHIP	100	5%	1/10W
R2902	1-216-025-91	RES,CHIP	100	5%	1/10W
R2903	1-216-073-00	RES,CHIP	10K	5%	1/10W
R2904	1-216-073-00	RES,CHIP	10K	5%	1/10W
R2905	1-216-073-00	RES,CHIP	10K	5%	1/10W
R2906	1-216-025-91	RES,CHIP	100	5%	1/10W
R2907	1-216-025-91	RES,CHIP	100	5%	1/10W

Ref.No.	Part No.	Description			Remark
R2908	1-216-121-91	RES,CHIP	1M	5%	1/10W
R2909	1-249-377-11	CARBON	0.47	5%	1/4W F
R2910	1-216-049-91	RES,CHIP	1K	5%	1/10W
R2911	1-216-049-91	RES,CHIP	1K	5%	1/10W
R2912	1-216-025-91	RES,CHIP	100	5%	1/10W
R2913	1-216-049-91	RES,CHIP	1K	5%	1/10W
R2914	1-216-049-91	RES,CHIP	1K	5%	1/10W
R2915	1-216-073-00	RES,CHIP	10K	5%	1/10W
R2916	1-216-073-00	RES,CHIP	10K	5%	1/10W
R2917	1-216-073-00	RES,CHIP	10K	5%	1/10W
R2918	1-216-073-00	RES,CHIP	10K	5%	1/10W
R2919	1-216-295-91	SHORT	0		
R2920	1-216-109-00	RES,CHIP	330K	5%	1/10W
R2921	1-216-073-00	RES,CHIP	10K	5%	1/10W
R2922	1-216-109-00	RES,CHIP	330K	5%	1/10W
R2923	1-216-073-00	RES,CHIP	10K	5%	1/10W
R2924	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R2925	1-216-073-00	RES,CHIP	10K	5%	1/10W
R2926	1-216-073-00	RES,CHIP	10K	5%	1/10W
R2927	1-216-073-00	RES,CHIP	10K	5%	1/10W
R2929	1-216-025-91	RES,CHIP	100	5%	1/10W
R2930	1-216-025-91	RES,CHIP	100	5%	1/10W
R2931	1-216-025-91	RES,CHIP	100	5%	1/10W
R2932	1-216-025-91	RES,CHIP	100	5%	1/10W
R2933	1-216-025-91	RES,CHIP	100	5%	1/10W
R2934	1-216-073-00	RES,CHIP	10K	5%	1/10W
R2936	1-216-049-91	RES,CHIP	1K	5%	1/10W
R2937	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R2938	1-216-073-00	RES,CHIP	10K	5%	1/10W
R2939	1-216-051-00	RES,CHIP	1.2K	5%	1/10W
R2940	1-216-025-91	RES,CHIP	100	5%	1/10W
R2941	1-216-025-91	RES,CHIP	100	5%	1/10W
R2942	1-216-073-00	RES,CHIP	10K	5%	1/10W
R2944	1-216-295-91	SHORT	0		
R2945	1-216-049-91	RES,CHIP	1K	5%	1/10W
R2947	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R2948	1-216-049-91	RES,CHIP	1K	5%	1/10W
R2949	1-216-025-91	RES,CHIP	100	5%	1/10W
R2950	1-216-025-91	RES,CHIP	100	5%	1/10W
R2951	1-216-049-91	RES,CHIP	1K	5%	1/10W
R2952	1-216-073-00	RES,CHIP	10K	5%	1/10W
R2953	1-216-073-00	RES,CHIP	10K	5%	1/10W
R2954	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R2955	1-216-025-91	RES,CHIP	100	5%	1/10W
R2956	1-216-037-00	RES,CHIP	330	5%	1/10W
R2957	1-216-295-91	SHORT	0		
R2958	1-216-295-91	SHORT	0		
R2959	1-216-295-91	SHORT	0		
R2960	1-216-295-91	SHORT	0		
R2961	1-216-049-91	RES,CHIP	1K	5%	1/10W
R2962	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R2963	1-216-025-91	RES,CHIP	100	5%	1/10W
R2964	1-216-025-91	RES,CHIP	100	5%	1/10W
R2965	1-216-083-00	RES,CHIP	27K	5%	1/10W
R2966	1-216-097-91	RES,CHIP	100K	5%	1/10W
R2967	1-216-073-00	RES,CHIP	10K	5%	1/10W
R2968	1-216-073-00	RES,CHIP	10K	5%	1/10W
R2969	1-216-083-00	RES,CHIP	27K	5%	1/10W
R2970	1-216-025-91	RES,CHIP	100	5%	1/10W
R2971	1-216-025-91	RES,CHIP	100	5%	1/10W
R2972	1-216-025-91	RES,CHIP	100	5%	1/10W
R2973	1-216-025-91	RES,CHIP	100	5%	1/10W
R2974	1-216-025-91	RES,CHIP	100	5%	1/10W
R2975	1-216-025-91	RES,CHIP	100	5%	1/10W
R2976	1-216-025-91	RES,CHIP	100	5%	1/10W
R2977	1-216-025-91	RES,CHIP	100	5%	1/10W

Ref.No.	Part No.	Description			Remark
R2978	1-216-025-91	RES,CHIP	100	5%	1/10W
R2979	1-216-073-00	RES,CHIP	10K	5%	1/10W
R2980	1-216-089-91	RES,CHIP	47K	5%	1/10W
R2981	1-216-109-00	RES,CHIP	330K	5%	1/10W
R2982	1-216-025-91	RES,CHIP	100	5%	1/10W
R2983	1-216-025-91	RES,CHIP	100	5%	1/10W
R2984	1-216-067-00	RES,CHIP	5.6K	5%	1/10W
R2985	1-216-089-91	RES,CHIP	47K	5%	1/10W
R2986	1-216-295-91	SHORT	0		
R2987	1-216-295-91	SHORT	0		
R2988	1-216-295-91	SHORT	0		
R2989	1-216-295-91	SHORT	0		
R2990	1-216-295-91	SHORT	0		
R2991	1-216-295-91	SHORT	0		
R2992	1-216-295-91	SHORT	0		
R2993	1-216-295-91	SHORT	0		
R2994	1-216-295-91	SHORT	0		
R2995	1-216-295-91	SHORT	0		
R2996	1-216-295-91	SHORT	0		

<VARIABLE RESISTOR>

RV2901	1-238-091-11	RES, ADJ CERMET 22K (0 SET)			

<RELAY>

RY2901	1-755-145-11	RELAY			
RY2902	1-755-145-11	RELAY			
RY2903	1-755-145-11	RELAY			

<SWITCH>

S2702	1-572-853-11	SWITCH, ROTARY (10)			
S2703	1-572-853-11	SWITCH, ROTARY (1)			
S2901	1-571-658-11	SWITCH, SLIDE (RS-232C/422)			

<TERMINAL BOARD>

TB2901	1-694-485-11	TERMINAL BOARD ASSY, I/O (RS-232C/422, PJ COM IN)			
TB2902	1-694-486-11	TERMINAL BOARD ASSY, I/O (PJ COM OUT, CONTROL-S IN/OUT)			

<CRYSTAL>

X2201	1-781-201-21	VIBRATOR, CRYSTAL (7.15909MHz)			
X2301	1-781-204-21	VIBRATOR, CRYSTAL (20MHz)			
X2701	1-781-202-21	VIBRATOR, CRYSTAL (16MHz)			
X2901	1-781-203-21	VIBRATOR, CRYSTAL (18.432MHz)			

****

* A-1390-961-A N MOUNT
****

<CAPACITOR>

C801	1-124-779-00	ELECT CHIP	10MF	20%	16V
C802	1-165-319-11	CERAMIC CHIP	0.1MF		50V

<CONNECTOR>

CN801	* 1-564-518-11	PLUG, CONNECTOR 3P			

Ref.No.	Part No.	Description			Remark
	<DIODE>				
D801	8-719-158-17	DIODE RD5.6SB2			
	<IC>				
IC801	8-742-088-10	HYB IC SBX1780-51			
	<RESISTOR>				
R801	1-216-025-91	RES,CHIP	100	5%	1/10W
R802	1-216-017-91	RES,CHIP	47	5%	1/10W
**					
	* A-1275-177-A	QA COMPL **********************			
	* X-4036-247-1	PANEL (QA) ASSY, REAR			
	1-562-579-21	RECEPTACLE, CONNECTOR 2P			
	4-396-203-01	SCREW (+B M3X12), PREVENTION			
	7-685-647-79	SCREW +BVTP 3X10 TYPE2 IT-3			
	<CAPACITOR>				
C8001	1-128-594-11	ELECT CHIP	1MF	20%	50V
C8002	1-128-594-11	ELECT CHIP	1MF	20%	50V
C8003	1-128-453-21	ELECT CHIP	47MF	20%	6.3V
C8004	1-128-453-21	ELECT CHIP	47MF	20%	6.3V
C8005	1-128-453-21	ELECT CHIP	47MF	20%	6.3V
C8006	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C8007	1-128-004-11	ELECT CHIP	10MF	20%	16V
C8008	1-128-004-11	ELECT CHIP	10MF	20%	16V
C8009	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C8010	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C8011	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C8012	1-128-004-11	ELECT CHIP	10MF	20%	16V
C8013	1-126-204-11	ELECT CHIP	47MF	20%	16V
C8014	1-128-013-11	ELECT CHIP	1MF	20%	50V
C8015	1-128-004-11	ELECT CHIP	10MF	20%	16V
C8016	1-126-204-11	ELECT CHIP	47MF	20%	16V
C8017	1-128-013-11	ELECT CHIP	1MF	20%	50V
C8018	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C8019	1-128-004-11	ELECT CHIP	10MF	20%	16V
C8020	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C8022	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C8024	1-163-239-11	CERAMIC CHIP	33PF	5%	50V
C8025	1-128-004-11	ELECT CHIP	10MF	20%	16V
C8026	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C8027	1-164-346-11	CERAMIC CHIP	1MF		16V
C8028	1-163-239-11	CERAMIC CHIP	33PF	5%	50V
C8029	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C8030	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C8031	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C8032	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C8033	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C8034	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C8035	1-128-004-11	ELECT CHIP	10MF	20%	16V
C8038	1-128-594-11	ELECT CHIP	1MF	20%	50V
C8039	1-128-594-11	ELECT CHIP	1MF	20%	50V
C8040	1-128-004-11	ELECT CHIP	10MF	20%	16V
C8041	1-128-004-11	ELECT CHIP	10MF	20%	16V
C8201	1-128-004-11	ELECT CHIP	10MF	20%	16V
C8202	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C8203	1-128-004-11	ELECT CHIP	10MF	20%	16V
C8204	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C8205	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C8206	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C8207	1-128-453-21	ELECT CHIP	47MF	20%	6.3V
C8208	1-128-453-21	ELECT CHIP	47MF	20%	6.3V
C8209	1-128-453-21	ELECT CHIP	47MF	20%	6.3V
C8210	1-126-204-11	ELECT CHIP	47MF	20%	16V
C8211	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C8212	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C8213	1-126-204-11	ELECT CHIP	47MF	20%	16V
C8214	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C8215	1-126-204-11	ELECT CHIP	47MF	20%	16V
C8216	1-126-204-11	ELECT CHIP	47MF	20%	16V
C8217	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C8218	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C8219	1-128-004-11	ELECT CHIP	10MF	20%	16V
C8220	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C8222	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C8223	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C8224	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C8225	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C8227	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C8228	1-128-004-11	ELECT CHIP	10MF	20%	16V
C8235	1-128-004-11	ELECT CHIP	10MF	20%	16V
C8236	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C8237	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C8238	1-163-217-11	CERAMIC CHIP	1PF	0.25PF	50V
C8239	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C8240	1-163-217-11	CERAMIC CHIP	1PF	0.25PF	50V
C8241	1-163-217-11	CERAMIC CHIP	1PF	0.25PF	50V
C8242	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C8243	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C8244	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C8245	1-128-004-11	ELECT CHIP	10MF	20%	16V
C8246	1-128-004-11	ELECT CHIP	10MF	20%	16V
C8247	1-128-004-11	ELECT CHIP	10MF	20%	16V
C8248	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C8249	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C8250	1-163-217-11	CERAMIC CHIP	1PF	0.25PF	50V
C8251	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C8252	1-163-217-11	CERAMIC CHIP	1PF	0.25PF	50V
C8253	1-163-217-11	CERAMIC CHIP	1PF	0.25PF	50V
C8254	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C8255	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C8256	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C8257	1-128-004-11	ELECT CHIP	10MF	20%	16V
C8258	1-128-004-11	ELECT CHIP	10MF	20%	16V
C8401	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C8402	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C8403	1-128-004-11	ELECT CHIP	10MF	20%	16V
C8404	1-128-004-11	ELECT CHIP	10MF	20%	16V
C8405	1-128-004-11	ELECT CHIP	10MF	20%	16V
C8406	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C8407	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C8408	1-163-217-11	CERAMIC CHIP	1PF	0.25PF	50V
C8409	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C8410	1-163-217-11	CERAMIC CHIP	1PF	0.25PF	50V
C8411	1-163-217-11	CERAMIC CHIP	1PF	0.25PF	50V
C8412	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C8413	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C8414	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C8415	1-128-004-11	ELECT CHIP	10MF	20%	16V
C8416	1-128-004-11	ELECT CHIP	10MF	20%	16V
C8417	1-128-004-11	ELECT CHIP	10MF	20%	16V
C8418	1-128-004-11	ELECT CHIP	10MF	20%	16V

Ref.No.	Part No.	Description	Remark
	<CONNECTOR>		
CN8001	* 1-564-948-21	PIN, CONNECTOR 3P	
CN8002	* 1-564-948-21	PIN, CONNECTOR 3P	
CN8003	* 1-564-948-21	PIN, CONNECTOR 3P	
CN8004	* 1-564-948-21	PIN, CONNECTOR 3P	
CN8005	* 1-564-948-21	PIN, CONNECTOR 3P	
CN8201	* 1-778-393-11	PIN, PC CONNECTOR 96P	
	<DIODE>		
D8001	8-719-800-76	DIODE 1SS226	
D8002	8-719-800-76	DIODE 1SS226	
D8003	8-719-800-76	DIODE 1SS226	
D8004	8-719-800-76	DIODE 1SS226	
D8005	8-719-800-76	DIODE 1SS226	
D8008	8-719-800-76	DIODE 1SS226	
D8009	8-719-800-76	DIODE 1SS226	
D8012	8-719-801-78	DIODE 1SS184	
D8013	8-719-800-76	DIODE 1SS226	
D8014	8-719-800-76	DIODE 1SS226	
D8015	8-719-800-76	DIODE 1SS226	
D8016	8-719-800-76	DIODE 1SS226	
D8201	8-719-800-76	DIODE 1SS226	
D8202	8-719-800-76	DIODE 1SS226	
D8203	8-719-800-76	DIODE 1SS226	
D8204	8-719-801-78	DIODE 1SS184	
D8205	8-719-801-78	DIODE 1SS184	
D8206	8-719-801-78	DIODE 1SS184	
D8207	8-719-800-76	DIODE 1SS226	
D8208	8-719-800-76	DIODE 1SS226	
	<FILTER>		
FL8401	1-234-158-21	FILTER, LOW PASS (50MHz)	
FL8402	1-234-158-21	FILTER, LOW PASS (50MHz)	
FL8403	1-234-158-21	FILTER, LOW PASS (50MHz)	
	<IC>		
IC8001	8-759-011-65	IC MC74HC4053F	
IC8002	8-759-011-64	IC MC74HC4052F	
IC8003	8-759-981-48	IC TL082M	
IC8004	8-759-510-71	IC BA10358F-E2	
IC8005	8-759-092-82	IC SN75157PS-ELL2000	
IC8006	8-759-510-71	IC BA10358F-E2	
IC8007	8-759-981-48	IC TL082M	
IC8008	8-759-491-36	IC TC74VHCT244AF(EL)	
IC8009	8-759-092-82	IC SN75157PS-ELL2000	
IC8010	8-759-185-82	IC TC74VHC153F(EL)	
IC8201	8-759-335-28	IC TA78M09F(TE16L)	
IC8202	8-759-032-20	IC MC74HC32AF	
IC8203	8-759-235-19	IC TC74HC08AF(EL)	
IC8204	8-759-032-11	IC MC74HC04AF	
IC8205	8-759-460-74	IC BA05FP-E2	
IC8206	8-759-431-38	IC MAX4121CSA-TE2	
IC8207	8-759-431-38	IC MAX4121CSA-TE2	
IC8208	8-759-431-38	IC MAX4121CSA-TE2	
IC8212	8-759-542-11	IC MAX4223ESA-TG068	
IC8213	8-759-542-11	IC MAX4223ESA-TG068	
IC8214	8-759-542-11	IC MAX4223ESA-TG068	
IC8215	8-759-577-22	IC OPA658U/2K5	
IC8216	8-759-577-22	IC OPA658U/2K5	
IC8217	8-759-577-22	IC OPA658U/2K5	
IC8401	8-759-577-22	IC OPA658U/2K5	
IC8402	8-759-577-22	IC OPA658U/2K5	
IC8403	8-759-577-22	IC OPA658U/2K5	

Ref.No.	Part No.	Description	Remark
	<JACK>		
J8001	* 1-694-163-11	TERMINAL BOARD ASSY, I/O (INPUT A)	
J8002	1-565-639-11	JACK, PIN 1P (L-V)	
J8003	1-565-641-11	JACK, PIN 1P (R-V)	
	<COIL>		
L8001	1-412-058-11	INDUCTOR CHIP 10µH	
L8002	1-412-058-11	INDUCTOR CHIP 10µH	
L8003	1-412-058-11	INDUCTOR CHIP 10µH	
L8004	1-412-058-11	INDUCTOR CHIP 10µH	
L8005	1-403-659-11	INDUCTOR 10nH	
L8006	1-403-659-11	INDUCTOR 10nH	
L8007	1-403-659-11	INDUCTOR 10nH	
L8008	1-403-664-11	INDUCTOR 27nH	
L8009	1-403-664-11	INDUCTOR 27nH	
L8010	1-403-664-11	INDUCTOR 27nH	
L8201	1-412-533-21	INDUCTOR 47µH	
L8202	1-412-533-21	INDUCTOR 47µH	
L8203	1-412-533-21	INDUCTOR 47µH	
	<TRANSISTOR>		
Q8001	8-729-230-49	TRANSISTOR 2SC2712-YG	
Q8002	8-729-230-49	TRANSISTOR 2SC2712-YG	
Q8005	8-729-230-49	TRANSISTOR 2SC2712-YG	
Q8006	8-729-216-22	TRANSISTOR 2SA1162-G	
Q8007	8-729-230-49	TRANSISTOR 2SC2712-YG	
Q8008	8-729-216-22	TRANSISTOR 2SA1162-G	
Q8011	8-729-216-22	TRANSISTOR 2SA1162-G	
Q8012	8-729-230-49	TRANSISTOR 2SC2712-YG	
Q8013	8-729-230-49	TRANSISTOR 2SC2712-YG	
Q8014	8-729-230-49	TRANSISTOR 2SC2712-YG	
Q8015	8-729-216-22	TRANSISTOR 2SA1162-G	
Q8016	8-729-230-49	TRANSISTOR 2SC2712-YG	
Q8017	8-729-216-22	TRANSISTOR 2SA1162-G	
Q8018	8-729-230-49	TRANSISTOR 2SC2712-YG	
Q8019	8-729-230-49	TRANSISTOR 2SC2712-YG	
Q8020	8-729-101-07	TRANSISTOR 2SB798-DL	
Q8201	8-729-230-49	TRANSISTOR 2SC2712-YG	
Q8202	8-729-230-49	TRANSISTOR 2SC2712-YG	
Q8203	8-729-230-49	TRANSISTOR 2SC2712-YG	
Q8204	8-729-230-49	TRANSISTOR 2SC2712-YG	
Q8205	8-729-230-49	TRANSISTOR 2SC2712-YG	
Q8206	8-729-230-49	TRANSISTOR 2SC2712-YG	
Q8401	8-729-107-31	TRANSISTOR 2SC3545-T43	
Q8402	8-729-107-31	TRANSISTOR 2SC3545-T43	
Q8403	8-729-107-31	TRANSISTOR 2SC3545-T43	
Q8404	8-729-112-65	TRANSISTOR 2SA1462-Y33	
Q8405	8-729-112-65	TRANSISTOR 2SA1462-Y33	
Q8406	8-729-112-65	TRANSISTOR 2SA1462-Y33	
	<RESISTOR>		
R8001	1-220-259-11	RES,CHIP 150 5% 1/4W	
R8002	1-220-259-11	RES,CHIP 150 5% 1/4W	
R8003	1-216-113-00	RES,CHIP 470K 5% 1/10W	
R8004	1-216-113-00	RES,CHIP 470K 5% 1/10W	
R8005	1-220-259-11	RES,CHIP 150 5% 1/4W	
R8006	1-216-631-11	METAL CHIP 150 0.50% 1/10W	
R8007	1-220-259-11	RES,CHIP 150 5% 1/4W	
R8008	1-216-631-11	METAL CHIP 150 0.50% 1/10W	
R8009	1-216-097-91	RES,CHIP 100K 5% 1/10W	
R8010	1-216-097-91	RES,CHIP 100K 5% 1/10W	
R8011	1-216-631-11	METAL CHIP 150 0.50% 1/10W	
R8012	1-216-631-11	METAL CHIP 150 0.50% 1/10W	
R8013	1-216-631-11	METAL CHIP 150 0.50% 1/10W	
R8014	1-216-631-11	METAL CHIP 150 0.50% 1/10W	

Ref.No.	Part No.	Description			Remark
R8015	1-216-049-91	RES,CHIP	1K	5%	1/10W
R8016	1-216-049-91	RES,CHIP	1K	5%	1/10W
R8017	1-216-089-91	RES,CHIP	47K	5%	1/10W
R8018	1-216-089-91	RES,CHIP	47K	5%	1/10W
R8019	1-216-089-91	RES,CHIP	47K	5%	1/10W
R8020	1-216-073-00	RES,CHIP	10K	5%	1/10W
R8021	1-216-073-00	RES,CHIP	10K	5%	1/10W
R8022	1-216-073-00	RES,CHIP	10K	5%	1/10W
R8023	1-216-073-00	RES,CHIP	10K	5%	1/10W
R8024	1-216-025-91	RES,CHIP	100	5%	1/10W
R8025	1-216-025-91	RES,CHIP	100	5%	1/10W
R8027	1-216-041-00	RES,CHIP	470	5%	1/10W
R8028	1-216-049-91	RES,CHIP	1K	5%	1/10W
R8031	1-216-097-91	RES,CHIP	100K	5%	1/10W
R8032	1-216-097-91	RES,CHIP	100K	5%	1/10W
R8033	1-216-095-00	RES,CHIP	82K	5%	1/10W
R8034	1-216-097-91	RES,CHIP	100K	5%	1/10W
R8035	1-216-089-91	RES,CHIP	47K	5%	1/10W
R8036	1-216-089-91	RES,CHIP	47K	5%	1/10W
R8037	1-216-097-91	RES,CHIP	100K	5%	1/10W
R8038	1-216-089-91	RES,CHIP	47K	5%	1/10W
R8039	1-216-089-91	RES,CHIP	47K	5%	1/10W
R8043	1-216-013-00	RES,CHIP	33	5%	1/10W
R8044	1-216-097-91	RES,CHIP	100K	5%	1/10W
R8045	1-216-097-91	RES,CHIP	100K	5%	1/10W
R8046	1-216-097-91	RES,CHIP	100K	5%	1/10W
R8047	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R8048	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R8049	1-216-097-91	RES,CHIP	100K	5%	1/10W
R8050	1-216-097-91	RES,CHIP	100K	5%	1/10W
R8051	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R8052	1-216-041-00	RES,CHIP	470	5%	1/10W
R8054	1-216-041-00	RES,CHIP	470	5%	1/10W
R8057	1-216-041-00	RES,CHIP	470	5%	1/10W
R8058	1-216-069-00	RES,CHIP	6.8K	5%	1/10W
R8059	1-216-635-11	METAL CHIP	220	0.50%	1/10W
R8060	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R8061	1-216-041-00	RES,CHIP	470	5%	1/10W
R8062	1-216-049-91	RES,CHIP	1K	5%	1/10W
R8063	1-216-639-11	METAL CHIP	330	0.50%	1/10W
R8064	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R8065	1-216-029-00	RES,CHIP	150	5%	1/10W
R8066	1-216-049-91	RES,CHIP	1K	5%	1/10W
R8067	1-216-013-00	RES,CHIP	33	5%	1/10W
R8068	1-216-013-00	RES,CHIP	33	5%	1/10W
R8069	1-216-089-91	RES,CHIP	47K	5%	1/10W
R8070	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R8073	1-216-097-91	RES,CHIP	100K	5%	1/10W
R8075	1-216-013-00	RES,CHIP	33	5%	1/10W
R8076	1-216-013-00	RES,CHIP	33	5%	1/10W
R8077	1-216-013-00	RES,CHIP	33	5%	1/10W
R8079	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R8080	1-216-013-00	RES,CHIP	33	5%	1/10W
R8081	1-216-025-91	RES,CHIP	100	5%	1/10W
R8082	1-216-013-00	RES,CHIP	33	5%	1/10W
R8083	1-216-013-00	RES,CHIP	33	5%	1/10W
R8085	1-216-073-00	RES,CHIP	10K	5%	1/10W
R8086	1-216-013-00	RES,CHIP	33	5%	1/10W
R8087	1-216-025-91	RES,CHIP	100	5%	1/10W
R8088	1-216-089-91	RES,CHIP	47K	5%	1/10W
R8089	1-216-089-91	RES,CHIP	47K	5%	1/10W
R8092	1-216-113-00	RES,CHIP	470K	5%	1/10W
R8093	1-216-113-00	RES,CHIP	470K	5%	1/10W
R8094	1-216-097-91	RES,CHIP	100K	5%	1/10W
R8095	1-216-097-91	RES,CHIP	100K	5%	1/10W
R8096	1-216-097-91	RES,CHIP	100K	5%	1/10W

Ref.No.	Part No.	Description			Remark
R8097	1-216-097-91	RES,CHIP	100K	5%	1/10W
R8098	1-216-113-00	RES,CHIP	470K	5%	1/10W
R8099	1-216-113-00	RES,CHIP	470K	5%	1/10W
R8100	1-216-113-00	RES,CHIP	470K	5%	1/10W
R8101	1-216-113-00	RES,CHIP	470K	5%	1/10W
R8102	1-216-097-91	RES,CHIP	100K	5%	1/10W
R8103	1-216-097-91	RES,CHIP	100K	5%	1/10W
R8104	1-216-097-91	RES,CHIP	100K	5%	1/10W
R8105	1-216-097-91	RES,CHIP	100K	5%	1/10W
R8106	1-216-013-00	RES,CHIP	33	5%	1/10W
R8107	1-216-013-00	RES,CHIP	33	5%	1/10W
R8108	1-216-097-91	RES,CHIP	100K	5%	1/10W
R8109	1-216-097-91	RES,CHIP	100K	5%	1/10W
R8110	1-216-013-00	RES,CHIP	33	5%	1/10W
R8111	1-216-013-00	RES,CHIP	33	5%	1/10W
R8112	1-216-013-00	RES,CHIP	33	5%	1/10W
R8113	1-216-013-00	RES,CHIP	33	5%	1/10W
R8120	1-216-013-00	RES,CHIP	33	5%	1/10W
R8121	1-216-013-00	RES,CHIP	33	5%	1/10W
R8122	1-216-097-91	RES,CHIP	100K	5%	1/10W
R8204	1-216-089-91	RES,CHIP	47K	5%	1/10W
R8205	1-216-089-91	RES,CHIP	47K	5%	1/10W
R8206	1-216-089-91	RES,CHIP	47K	5%	1/10W
R8207	1-216-089-91	RES,CHIP	47K	5%	1/10W
R8208	1-216-089-91	RES,CHIP	47K	5%	1/10W
R8209	1-216-089-91	RES,CHIP	47K	5%	1/10W
R8210	1-216-089-91	RES,CHIP	47K	5%	1/10W
R8211	1-216-089-91	RES,CHIP	47K	5%	1/10W
R8212	1-216-021-00	RES,CHIP	68	5%	1/10W
R8213	1-216-021-00	RES,CHIP	68	5%	1/10W
R8214	1-216-021-00	RES,CHIP	68	5%	1/10W
R8215	1-216-021-00	RES,CHIP	68	5%	1/10W
R8216	1-216-021-00	RES,CHIP	68	5%	1/10W
R8217	1-216-021-00	RES,CHIP	68	5%	1/10W
R8218	1-216-097-91	RES,CHIP	100K	5%	1/10W
R8219	1-216-097-91	RES,CHIP	100K	5%	1/10W
R8220	1-216-097-91	RES,CHIP	100K	5%	1/10W
R8224	1-216-631-11	METAL CHIP	150	0.50%	1/10W
R8225	1-216-631-11	METAL CHIP	150	0.50%	1/10W
R8226	1-216-631-11	METAL CHIP	150	0.50%	1/10W
R8227	1-216-631-11	METAL CHIP	150	0.50%	1/10W
R8228	1-216-631-11	METAL CHIP	150	0.50%	1/10W
R8229	1-216-631-11	METAL CHIP	150	0.50%	1/10W
R8230	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R8231	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R8232	1-216-295-91	SHORT	0		
R8233	1-216-295-91	SHORT	0		
R8234	1-216-295-91	SHORT	0		
R8235	1-216-635-11	METAL CHIP	220	0.50%	1/10W
R8236	1-216-635-11	METAL CHIP	220	0.50%	1/10W
R8237	1-216-635-11	METAL CHIP	220	0.50%	1/10W
R8238	1-216-635-11	METAL CHIP	220	0.50%	1/10W
R8239	1-216-635-11	METAL CHIP	220	0.50%	1/10W
R8240	1-216-635-11	METAL CHIP	220	0.50%	1/10W
R8241	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R8242	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R8243	1-216-631-11	METAL CHIP	150	0.50%	1/10W
R8244	1-216-631-11	METAL CHIP	150	0.50%	1/10W
R8245	1-216-631-11	METAL CHIP	150	0.50%	1/10W
R8246	1-216-631-11	METAL CHIP	150	0.50%	1/10W
R8247	1-216-631-11	METAL CHIP	150	0.50%	1/10W
R8248	1-216-631-11	METAL CHIP	150	0.50%	1/10W
R8249	1-216-097-91	RES,CHIP	100K	5%	1/10W
R8250	1-216-097-91	RES,CHIP	100K	5%	1/10W
R8251	1-216-097-91	RES,CHIP	100K	5%	1/10W
R8252	1-216-295-91	SHORT	0		

Ref.No.	Part No.	Description		Remark	
R8253	1-216-295-91	SHORT	0		
R8254	1-216-295-91	SHORT	0		
R8255	1-216-641-11	METAL CHIP	390	0.50%	1/10W
R8256	1-216-641-11	METAL CHIP	390	0.50%	1/10W
R8257	1-216-641-11	METAL CHIP	390	0.50%	1/10W
R8258	1-216-641-11	METAL CHIP	390	0.50%	1/10W
R8259	1-216-641-11	METAL CHIP	390	0.50%	1/10W
R8260	1-216-641-11	METAL CHIP	390	0.50%	1/10W
R8261	1-216-631-11	METAL CHIP	150	0.50%	1/10W
R8262	1-216-631-11	METAL CHIP	150	0.50%	1/10W
R8263	1-216-631-11	METAL CHIP	150	0.50%	1/10W
R8264	1-216-631-11	METAL CHIP	150	0.50%	1/10W
R8265	1-216-631-11	METAL CHIP	150	0.50%	1/10W
R8266	1-216-631-11	METAL CHIP	150	0.50%	1/10W
R8267	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R8268	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R8269	1-216-073-00	RES,CHIP	10K	5%	1/10W
R8270	1-216-073-00	RES,CHIP	10K	5%	1/10W
R8271	1-216-001-00	RES,CHIP	10	5%	1/10W
R8272	1-216-001-00	RES,CHIP	10	5%	1/10W
R8273	1-216-001-00	RES,CHIP	10	5%	1/10W
R8274	1-216-017-91	RES,CHIP	47	5%	1/10W
R8275	1-216-017-91	RES,CHIP	47	5%	1/10W
R8276	1-216-017-91	RES,CHIP	47	5%	1/10W
R8277	1-216-097-91	RES,CHIP	100K	5%	1/10W
R8278	1-216-097-91	RES,CHIP	100K	5%	1/10W
R8279	1-216-097-91	RES,CHIP	100K	5%	1/10W
R8280	1-216-021-00	RES,CHIP	68	5%	1/10W
R8281	1-216-021-00	RES,CHIP	68	5%	1/10W
R8282	1-216-021-00	RES,CHIP	68	5%	1/10W
R8285	1-216-049-91	RES,CHIP	1K	5%	1/10W
R8286	1-216-049-91	RES,CHIP	1K	5%	1/10W
R8287	1-216-049-91	RES,CHIP	1K	5%	1/10W
R8288	1-216-049-91	RES,CHIP	1K	5%	1/10W
R8401	1-216-017-91	RES,CHIP	47	5%	1/10W
R8402	1-216-097-91	RES,CHIP	100K	5%	1/10W
R8403	1-216-097-91	RES,CHIP	100K	5%	1/10W
R8404	1-216-017-91	RES,CHIP	47	5%	1/10W
R8405	1-216-017-91	RES,CHIP	47	5%	1/10W
R8406	1-216-097-91	RES,CHIP	100K	5%	1/10W
R8407	1-216-049-91	RES,CHIP	1K	5%	1/10W
R8408	1-216-049-91	RES,CHIP	1K	5%	1/10W
R8409	1-216-049-91	RES,CHIP	1K	5%	1/10W
R8410	1-216-635-11	METAL CHIP	220	0.50%	1/10W
R8411	1-216-635-11	METAL CHIP	220	0.50%	1/10W
R8412	1-216-635-11	METAL CHIP	220	0.50%	1/10W
R8416	1-216-635-11	METAL CHIP	220	0.50%	1/10W
R8417	1-216-635-11	METAL CHIP	220	0.50%	1/10W
R8418	1-216-635-11	METAL CHIP	220	0.50%	1/10W
R8419	1-216-025-91	RES,CHIP	100	5%	1/10W
R8420	1-216-025-91	RES,CHIP	100	5%	1/10W
R8421	1-216-025-91	RES,CHIP	100	5%	1/10W
R8422	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R8423	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R8424	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R8425	1-216-017-91	RES,CHIP	47	5%	1/10W
R8426	1-216-017-91	RES,CHIP	47	5%	1/10W
R8427	1-216-017-91	RES,CHIP	47	5%	1/10W
R8428	1-216-295-91	SHORT	0		
R8429	1-216-295-91	SHORT	0		
R8430	1-216-295-91	SHORT	0		
R8431	1-216-641-11	METAL CHIP	390	0.50%	1/10W
R8432	1-216-641-11	METAL CHIP	390	0.50%	1/10W
R8433	1-216-641-11	METAL CHIP	390	0.50%	1/10W
R8434	1-216-642-11	METAL CHIP	430	0.50%	1/10W
R8435	1-216-642-11	METAL CHIP	430	0.50%	1/10W
R8436	1-216-642-11	METAL CHIP	430	0.50%	1/10W
R8443	1-216-081-00	RES,CHIP	22K	5%	1/10W
R8444	1-216-081-00	RES,CHIP	22K	5%	1/10W
R8445	1-216-081-00	RES,CHIP	22K	5%	1/10W

<RELAY>

Ref.No.	Part No.	Description
RY8201	1-755-177-11	RELAY
RY8202	1-755-177-11	RELAY
RY8203	1-755-177-11	RELAY
RY8204	1-755-177-11	RELAY
RY8205	1-755-177-11	RELAY
RY8206	1-755-177-11	RELAY
RY8207	1-755-177-11	RELAY

`************************************************************`

* A-1275-166-A QB COMPL (VPL-FE100E) (IFB-X2000E)

`**********************`

Ref.No.	Part No.	Description
	* X-4036-245-1	PANEL (QB/E) ASSY, REAR
	4-396-203-01	SCREW (+B M3X12), PREVENTION
	7-685-647-79	SCREW +BVTP 3X10 TYPE2 IT-3

<CAPACITOR>

Ref.No.	Part No.	Description		Remark	
C8502	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V

<CONNECTOR>

Ref.No.	Part No.	Description
CN8501	* 1-564-728-11	PIN, CONNECTOR (SMALL TYPE)12P
CN8502	* 1-564-720-11	PIN, CONNECTOR (SMALL TYPE) 4P

<JACK>

Ref.No.	Part No.	Description
J8503	1-565-838-11	JACK BLOCK, PIN 2P

<RESISTOR>

Ref.No.	Part No.	Description		Remark	
R8513	1-216-025-91	RES,CHIP	100	5%	1/10W
R8514	1-216-025-91	RES,CHIP	100	5%	1/10W
R8515	1-216-097-91	RES,CHIP	100K	5%	1/10W
R8516	1-216-097-91	RES,CHIP	100K	5%	1/10W
R8517	1-216-097-91	RES,CHIP	100K	5%	1/10W
R8518	1-216-113-00	RES,CHIP	470K	5%	1/10W
R8519	1-216-113-00	RES,CHIP	470K	5%	1/10W
R8520	1-216-113-00	RES,CHIP	470K	5%	1/10W
R8521	1-216-113-00	RES,CHIP	470K	5%	1/10W

`************************************************************`

* A-1275-161-A QB COMPL (VPL-FE100U/FE100M)

`**********************`

Ref.No.	Part No.	Description
	* X-4036-248-1	PANEL (QB) ASSY, REAR
	4-396-203-01	SCREW (+B M3X12), PREVENTION
	7-685-647-79	SCREW +BVTP 3X10 TYPE2 IT-3

<CAPACITOR>

Ref.No.	Part No.	Description		Remark	
C8501	1-104-664-11	ELECT	47MF	20%	16V
C8502	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C8503	1-104-664-11	ELECT	47MF	20%	16V
C8504	1-104-664-11	ELECT	47MF	20%	16V
C8505	1-104-664-11	ELECT	47MF	20%	16V

Ref.No.	Part No.	Description			Remark
C8506	1-109-889-11	ELECT	1MF	20%	50V
C8507	1-109-889-11	ELECT	1MF	20%	50V
C8508	1-126-786-11	ELECT	47MF	20%	16V
C8509	1-126-786-11	ELECT	47MF	20%	16V
C8510	1-126-786-11	ELECT	47MF	20%	16V
C8511	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C8512	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C8513	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
	<CONNECTOR>				
CN8501	* 1-564-728-11	PIN, CONNECTOR (SMALL TYPE)12P			
CN8502	* 1-564-720-11	PIN, CONNECTOR (SMALL TYPE) 4P			
	<DIODE>				
D8501	8-719-801-78	DIODE 1SS184			
D8502	8-719-106-53	DIODE RD10M-B2			
D8503	8-719-106-53	DIODE RD10M-B2			
D8505	8-719-106-53	DIODE RD10M-B2			
	<JACK>				
J8502	1-565-838-11	JACK BLOCK, PIN 2P			
J8503	1-565-838-11	JACK BLOCK, PIN 2P			
	<TRANSISTOR>				
Q8501	8-729-230-49	TRANSISTOR 2SC2712-YG			
Q8502	8-729-230-49	TRANSISTOR 2SC2712-YG			
Q8503	8-729-230-49	TRANSISTOR 2SC2712-YG			
Q8504	8-729-230-49	TRANSISTOR 2SC2712-YG			
	<RESISTOR>				
R8501	1-216-631-11	METAL CHIP	150	0.50%	1/10W
R8502	1-216-631-11	METAL CHIP	150	0.50%	1/10W
R8503	1-216-631-11	METAL CHIP	150	0.50%	1/10W
R8504	1-216-631-11	METAL CHIP	150	0.50%	1/10W
R8505	1-216-631-11	METAL CHIP	150	0.50%	1/10W
R8506	1-216-631-11	METAL CHIP	150	0.50%	1/10W
R8507	1-216-017-91	RES,CHIP	47	5%	1/10W
R8508	1-216-017-91	RES,CHIP	47	5%	1/10W
R8509	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R8510	1-216-017-91	RES,CHIP	47	5%	1/10W
R8511	1-216-025-91	RES,CHIP	100	5%	1/10W
R8512	1-216-025-91	RES,CHIP	100	5%	1/10W
R8513	1-216-025-91	RES,CHIP	100	5%	1/10W
R8514	1-216-025-91	RES,CHIP	100	5%	1/10W
R8515	1-216-097-91	RES,CHIP	100K	5%	1/10W
R8516	1-216-097-91	RES,CHIP	100K	5%	1/10W
R8517	1-216-097-91	RES,CHIP	100K	5%	1/10W
R8518	1-216-113-00	RES,CHIP	470K	5%	1/10W
R8519	1-216-113-00	RES,CHIP	470K	5%	1/10W
R8520	1-216-113-00	RES,CHIP	470K	5%	1/10W
R8521	1-216-113-00	RES,CHIP	470K	5%	1/10W
R8522	1-216-025-91	RES,CHIP	100	5%	1/10W
R8523	1-216-081-00	RES,CHIP	22K	5%	1/10W
R8524	1-216-081-00	RES,CHIP	22K	5%	1/10W
R8525	1-216-081-00	RES,CHIP	22K	5%	1/10W
R8526	1-216-089-91	RES,CHIP	47K	5%	1/10W
R8527	1-216-089-91	RES,CHIP	47K	5%	1/10W
R8528	1-216-089-91	RES,CHIP	47K	5%	1/10W
R8529	1-216-041-00	RES,CHIP	470	5%	1/10W
R8530	1-216-041-00	RES,CHIP	470	5%	1/10W
R8531	1-216-041-00	RES,CHIP	470	5%	1/10W
R8532	1-216-017-91	RES,CHIP	47	5%	1/10W

Ref.No.	Part No.	Description			Remark
R8533	1-216-017-91	RES,CHIP	47	5%	1/10W
R8534	1-216-017-91	RES,CHIP	47	5%	1/10W
	<RELAY>				
RY8501	1-515-716-11	RELAY (TQ2-5V)			
	<TERMINAL BOARD>				
TB8501	1-694-477-11	TERMINAL BOARD ASSY, I/O			

****

Ref.No.	Part No.	Description			Remark
	* 1-675-362-11	PWB, UA **********************			
	<CONNECTOR>				
CN601	* 1-564-507-11	PLUG, CONNECTOR 4P			
	<PHOTO COUPLER>				
PH601	1-806-293-12	PHOTO INTERRUPTER EE-SX1071			
	<TRANSISTOR>				
Q601	1-801-806-11	TRANSISTOR DTC144EKA-T146			
	<RESISTOR>				
R601	1-216-031-00	RES,CHIP	180	5%	1/10W

****

Ref.No.	Part No.	Description			Remark
	* 1-675-363-11	PWB, UB **********************			
	<CONNECTOR>				
CN701	* 1-564-517-11	PLUG, CONNECTOR 2P			
	<SWITCH>				
S701	1-570-245-11	SWITCH, MICRO (CVR-PROT-BA, CB)			

****

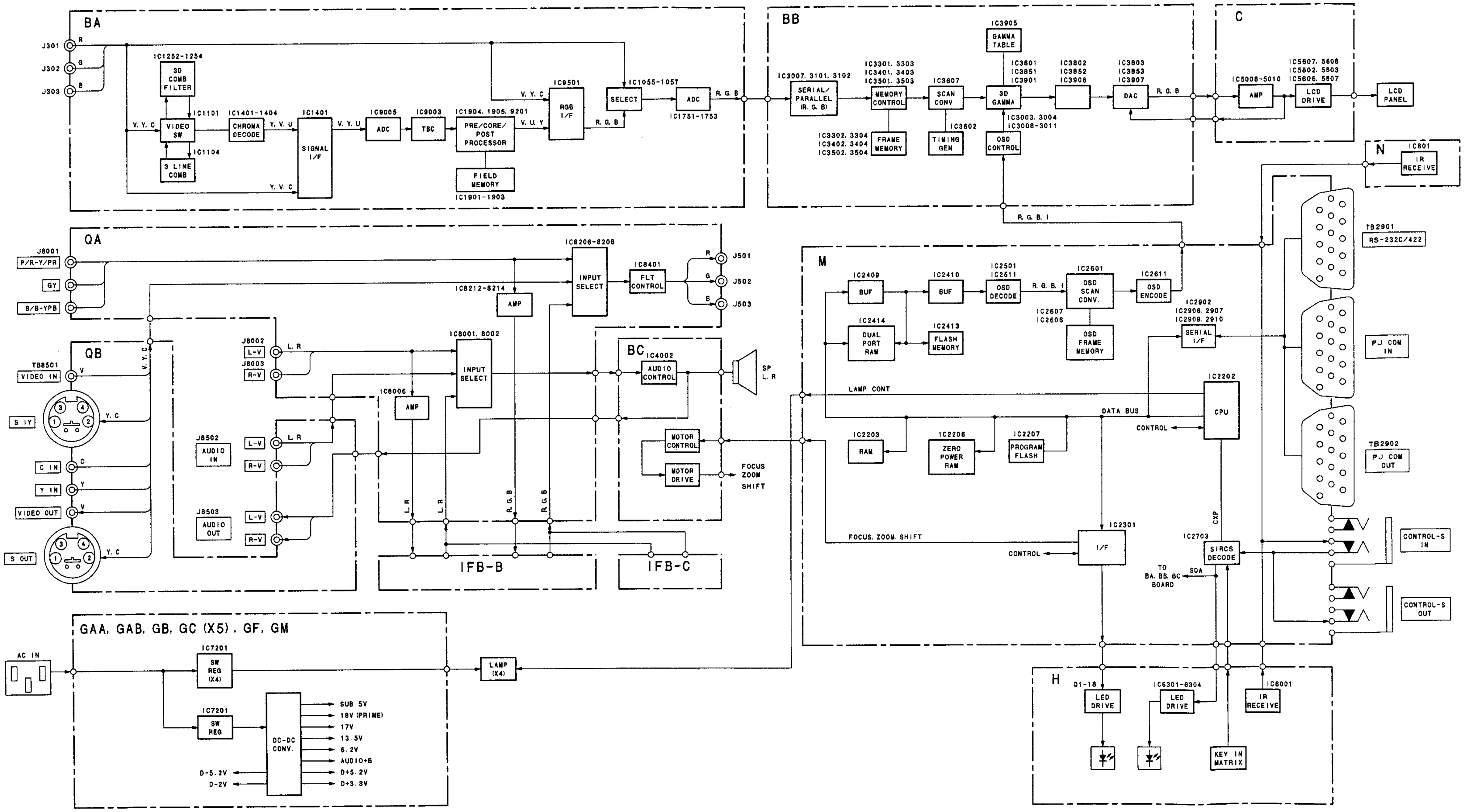
Ref.No.	Part No.	Description			Remark
	* 1-675-364-11	PWB, UC **********************			
	<CONNECTOR>				
CN751	* 1-564-517-11	PLUG, CONNECTOR 2P			
	<SWITCH>				
S751	1-570-245-11	SWITCH, MICRO (CVR-PROT-CB)			

V XA XB XC

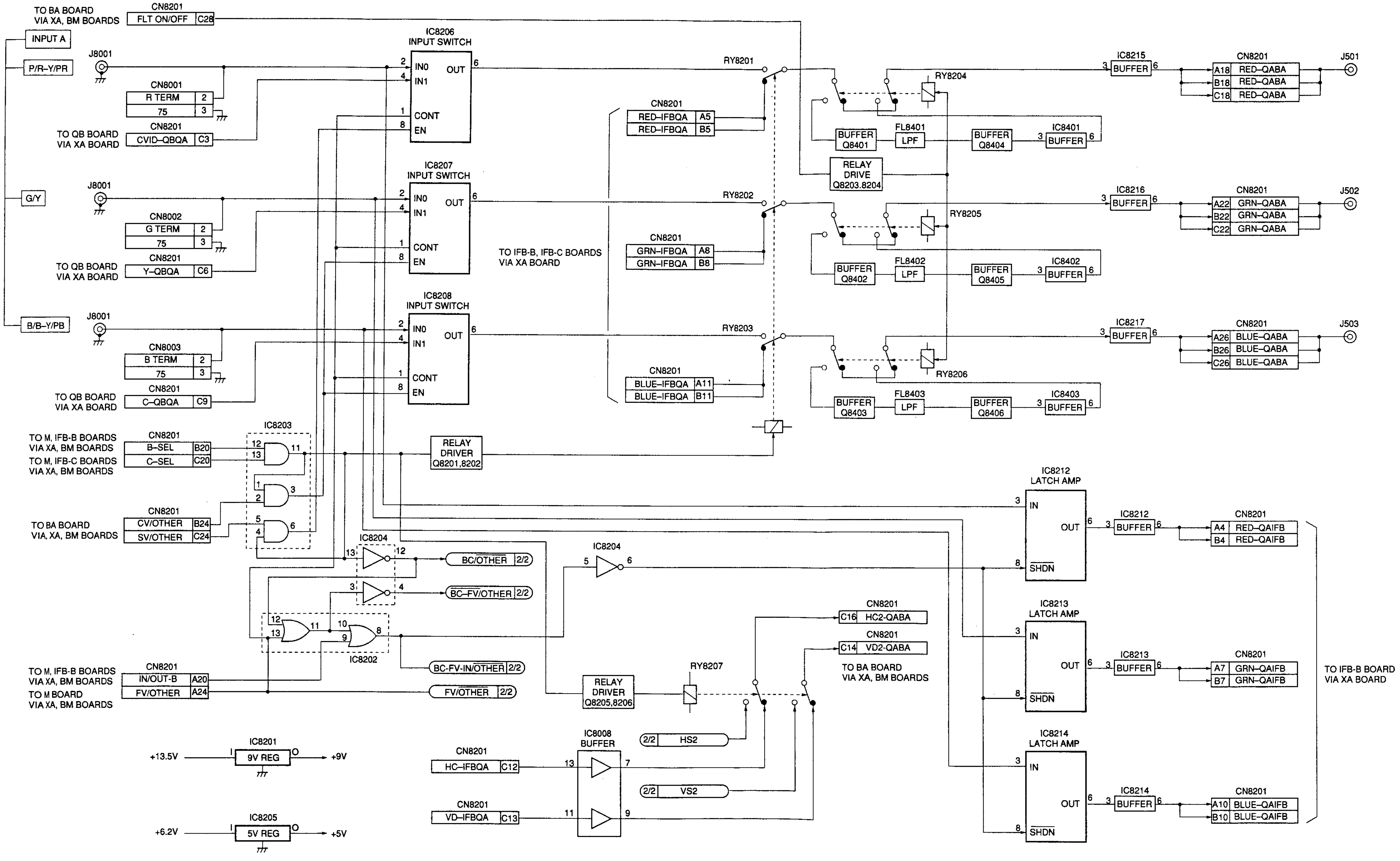
Ref.No.	Part No.	Description	Remark
		***	
	* 1-675-366-11	PWB, V **********************	
	* 1-778-697-11	HOUSING, CONNECTOR 3P	
		<CONNECTOR>	
CN901	* 1-564-519-11	PLUG, CONNECTOR 4P	
		<FUSE>	
F901	⚠1-532-990-11	FUSE, TEMPERATURE (1A/250V)	
		<SWITCH>	
S901	1-771-808-11	SWITCH, THERMAL GUARD (TEMP-PROT-LP)	
		***	
	* A-1390-879-A	XA MOUNT **********************	
		<CONNECTOR>	
CN501	* 1-778-391-11	SOCKET, PC CONNECTOR 96P	
CN502	* 1-778-391-11	SOCKET, PC CONNECTOR 96P	
CN503	* 1-778-391-11	SOCKET, PC CONNECTOR 96P	
CN504	* 1-778-391-11	SOCKET, PC CONNECTOR 96P	
CN505	* 1-564-714-11	PIN, CONNECTOR (SMALL TYPE)12P	
CN506	* 1-564-705-11	PIN, CONNECTOR (SMALL TYPE) 3P	
CN507	* 1-564-706-11	PIN, CONNECTOR (SMALL TYPE) 4P	
		<JACK>	
J501	1-568-547-11	JACK, MINIATUER PIN	
J502	1-568-547-11	JACK, MINIATUER PIN	
J503	1-568-547-11	JACK, MINIATUER PIN	
		<RESISTOR>	
R501	1-216-396-11	METAL OXIDE 3.9 5%	3W F
R502	1-216-396-11	METAL OXIDE 3.9 5%	3W F
R503	1-216-396-11	METAL OXIDE 3.9 5%	3W F
		***	
	* A-1390-880-A	XB MOUNT **********************	
		***	
	* A-1390-906-A	XC MOUNT **********************	
		<CONNECTOR>	
CN551	* 1-564-712-11	PIN, CONNECTOR (SMALL TYPE)10P	
CN552	* 1-564-708-11	PIN, CONNECTOR (SMALL TYPE) 6P	
CN553	* 1-564-710-11	PIN, CONNECTOR (SMALL TYPE) 8P	
CN554	* 1-564-716-11	PIN, CONNECTOR (SMALL TYPE)14P	
CN555	* 1-564-712-11	PIN, CONNECTOR (SMALL TYPE)10P	
CN556	* 1-564-708-11	PIN, CONNECTOR (SMALL TYPE) 6P	
CN557	* 1-564-710-11	PIN, CONNECTOR (SMALL TYPE) 8P	
CN558	* 1-564-716-11	PIN, CONNECTOR (SMALL TYPE)14P	
		***	
		MISCELLANEOUS **********************	
	⚠1-468-439-11	POWER BLOCK	
	1-500-037-11	CORE, FERRITE (WITH CASE)	
	1-500-051-11	BEAD, FERRITE (WITH CASE)	
	1-504-673-11	SPEAKER (12.6X5.7CM)	
	* 1-506-622-11	CONNECTOR, PS 14P	
	⚠1-533-694-11	FUSE 5A/250V (FE100U)	
	1-533-702-11	HOLDER, FUSE (FE100E/FE100M)	
	1-533-703-11	HOLDER, FUSE (FE100U)	
	1-543-947-11	CORE, FERRITE	
	⚠1-576-233-11	FUSE (H.B.C.) 6.3A/250V (FE100E/FE100M)	
	⚠1-590-151-11	CORD SET, POWER 100A/250V (FE100E/FE100M)	
	1-758-372-11	OPTICAL UNIT	
	1-763-238-11	FAN, DC	
	1-763-256-11	FAN, DC	
	1-763-257-11	FAN, DC	
	1-763-259-11	FAN, DC	
	1-763-260-11	FAN, DC	
	1-763-274-11	FAN, DC	
	⚠1-775-981-11	CORD SET, POWER (150A/125V) (FE100U)	
	1-782-021-11	CORD, CONNECTION	
	1-785-523-11	TERMINATOR, D SUB 9P	
	⚠1-785-591-11	INLET, AC	
		***	
		ACCESSORY **********************	
	* 1-506-622-11	CONNECTOR, PS 14P	
	⚠1-590-151-11	CORD SET, POWER (100A/250V) (FE100E/FE100M)	
	⚠1-775-981-11	CORD SET, POWER (150A/125V) (FE100U)	
	1-782-021-11	CORD, CONNECTION	
	1-785-523-11	TERMINATOR, D SUB 9P	
	3-867-465-11	OPERATING INSTRUCTIONS (FE100U/FE100E/FE100M) (ENGLISH/FRENCH/SPANISH)	
	3-867-465-21	OPERATING INSTRUCTIONS (FE100E) (GERMAN/ITALIAN)	
	3-867-465-31	OPERATING INSTRUCTIONS (FE100M) (CHINESE)	
	3-867-466-11	INSTALLATION MANUAL FOR DEALER (FE100U/FE100E/FE100M) (ENGLISH/FRENCH/SPANISH)	
	3-867-466-21	INSTALLATION MANUAL FOR DEALER (FE100E) (GERMAN/ITALIAN)	
	3-867-466-31	INSTALLATION MANUAL FOR DEALER (FE100M) (CHINESE)	
	4-068-063-02	SCREW, WASHER	
	* 4-070-718-01	RING (STF), LENS	
	* 4-070-719-01	WASHER (STF), LENS	

Ref.No.	Part No.	Description	Remark
**			
		PSS-2000	
		**********************	
	3-865-453-01	INSTRUCTION MANUAL	
	4-056-753-01	SPACER	
	4-068-372-01	BOLT(M10X20), HEXAGON HEAD	
	7-623-215-22	WASHER(M10), LOCK SPRING	
	7-683-353-07	BOLT(M6X12), HEXAGON HEAD	
	7-683-380-07	BOLT(M8X20), HEXAGON	
	7-688-000-22	WASHER(M8), FLAT	
	7-688-000-23	WASHER(M10), PLAIN	
	7-688-006-12	WASHER(M6), PLAIN	
**			
		SU-PJ2000	
		**********************	
	3-865-454-01	INSTALLATION MANUAL	
	4-068-378-01	WASHER(M10), PLAIN	
	4-068-379-01	SCREW(M10X20)	
	4-068-380-01	WASHER(M10), SPRING LOCK	
	4-068-381-01	SCREW(M5X12)	
	* 4-068-382-01	BRACKET, STACK	
	* 4-068-383-01	SHAFT, STACK	
**			

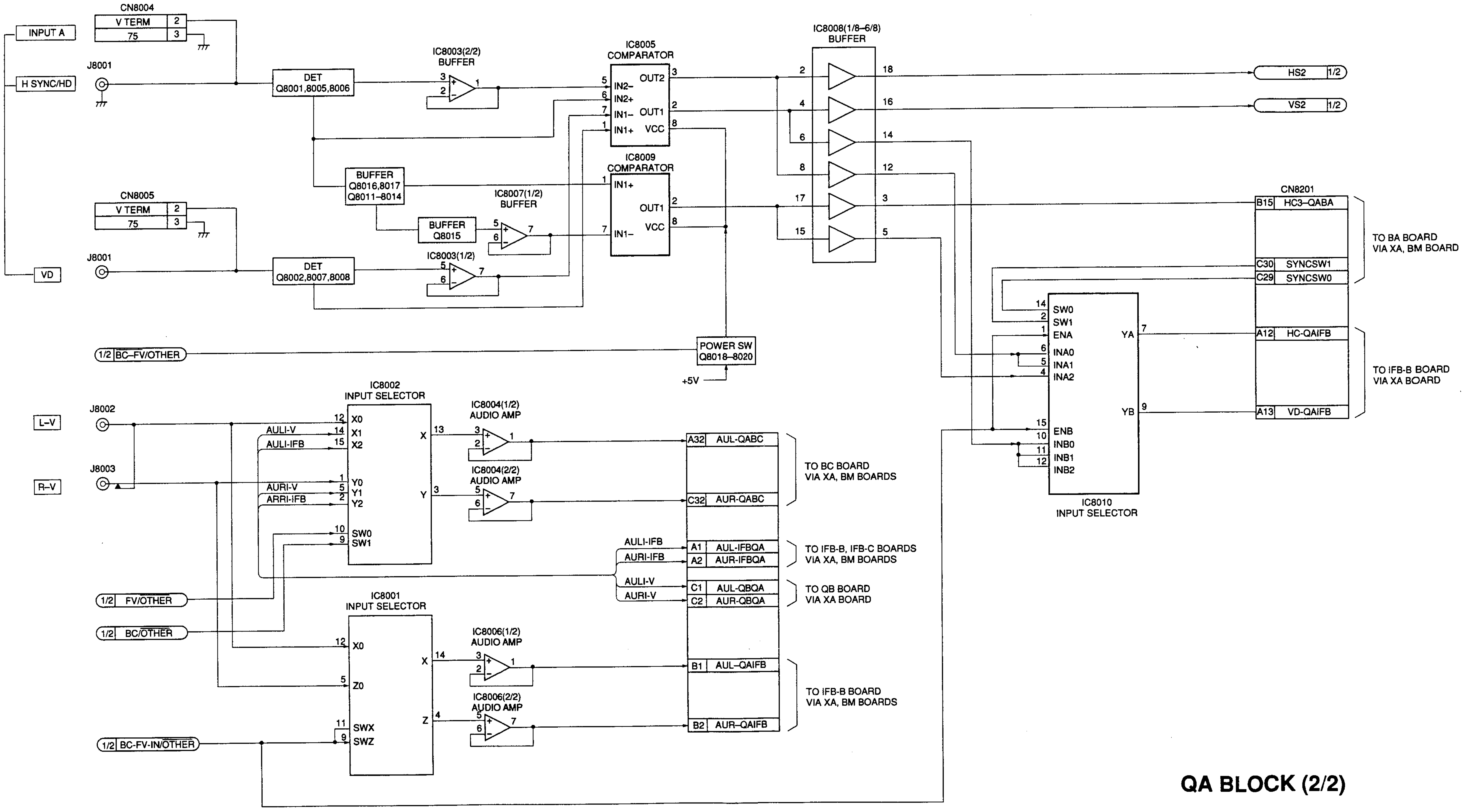
Section 9
Block Diagrams


BA
J301
J302
J303
R
G
B
IC1252-1254
3D COMB FILTER
IC1101
IC1104
V. Y. C
VIDEO SW
3 LINE COMB
IC1401-1404
CHROMA DECODE
Y. V. U
IC1401
SIGNAL I/F
Y. V. C
V. Y. U
IC9005
ADC
IC9003
TBC
IC1904, 1905, 9201
PRE/CORE/ POST PROCESSOR
FIELD MEMORY
IC1901-1903
V. U. Y
V. Y. C
IC9501
RGB I/F
R. G. B
SELECT
IC1055-1057
ADC
IC1751-1753
R. G. B
BB
IC3007, 3101, 3102
SERIAL/ PARALLEL (R. G. B)
IC3301, 3303
IC3401, 3403
IC3501, 3503
MEMORY CONTROL
IC3302, 3304
IC3402, 3404
IC3502, 3504
FRAME MEMORY
IC3607
SCAN CONV.
IC3602
TIMING GEN
IC3905
GAMMA TABLE
IC3801
IC3851
IC3901
3D GAMMA
IC3003, 3004
IC3008-3011
OSD CONTROL
IC3802
IC3852
IC3906
IC3803
IC3853
IC3907
DAC
R. G. B
C
IC5008-5010
AMP
IC5607, 5608
IC5802, 5803
IC5806, 5807
LCD DRIVE
LCD PANEL
N
IC801
IR RECEIVE
R. G. B. I
QA
J8001
P/R-Y/PR
GY
B/B-YPB
IC8206-8208
INPUT SELECT
IC8212-8214
AMP
IC8401
FLT CONTROL
R
G
B
J501
J502
J503
QB
TB8501
VIDEO IN
V
S IY
Y. C
C IN
C
Y IN
Y
VIDEO OUT
V
S OUT
Y. C
V. Y. C
J8002
L-V
J8003
R-V
L. R
J8502
AUDIO IN
L-V
R-V
L. R
J8503
AUDIO OUT
L-V
R-V
IC8001, 8002
INPUT SELECT
IC8006
AMP
L. R
L. R
R. G. B
R. G. B
IFB-B
IFB-C
BC
IC4002
AUDIO CONTROL
SP L. R
MOTOR CONTROL
MOTOR DRIVE
FOCUS ZOOM SHIFT
M
IC2409
BUF
IC2410
BUF
IC2501
IC2511
OSD DECODE
R. G. B. I
IC2601
OSD SCAN CONV.
IC2607
IC2608
OSD FRAME MEMORY
IC2611
OSD ENCODE
IC2414
DUAL PORT RAM
IC2413
FLASH MEMORY
IC2902
IC2906, 2907
IC2909, 2910
SERIAL I/F
LAMP CONT
IC2202
CPU
DATA BUS
CONTROL
IC2203
RAM
IC2206
ZERO POWER RAM
IC2207
PROGRAM FLASH
FOCUS, ZOOM, SHIFT
IC2301
I/F
CONTROL
CXP
IC2703
SIRCS DECODE
TO BA, BB, BC BOARD
SDA
TB2901
RS-232C/422
PJ COM IN
TB2902
PJ COM OUT
CONTROL-S IN
CONTROL-S OUT
GAA, GAB, GB, GC (X5) , GF, GM
AC IN
IC7201
SW REG (X4)
IC7201
SW REG
DC-DC CONV.
SUB 5V
18V (PRIME)
17V
13.5V
6.2V
AUDIO+B
D+5.2V
D+3.3V
D-5.2V
D-2V
LAMP (X4)
H
Q1-18
LED DRIVE
IC6301-6304
LED DRIVE
IC6001
IR RECEIVE
KEY IN MATRIX

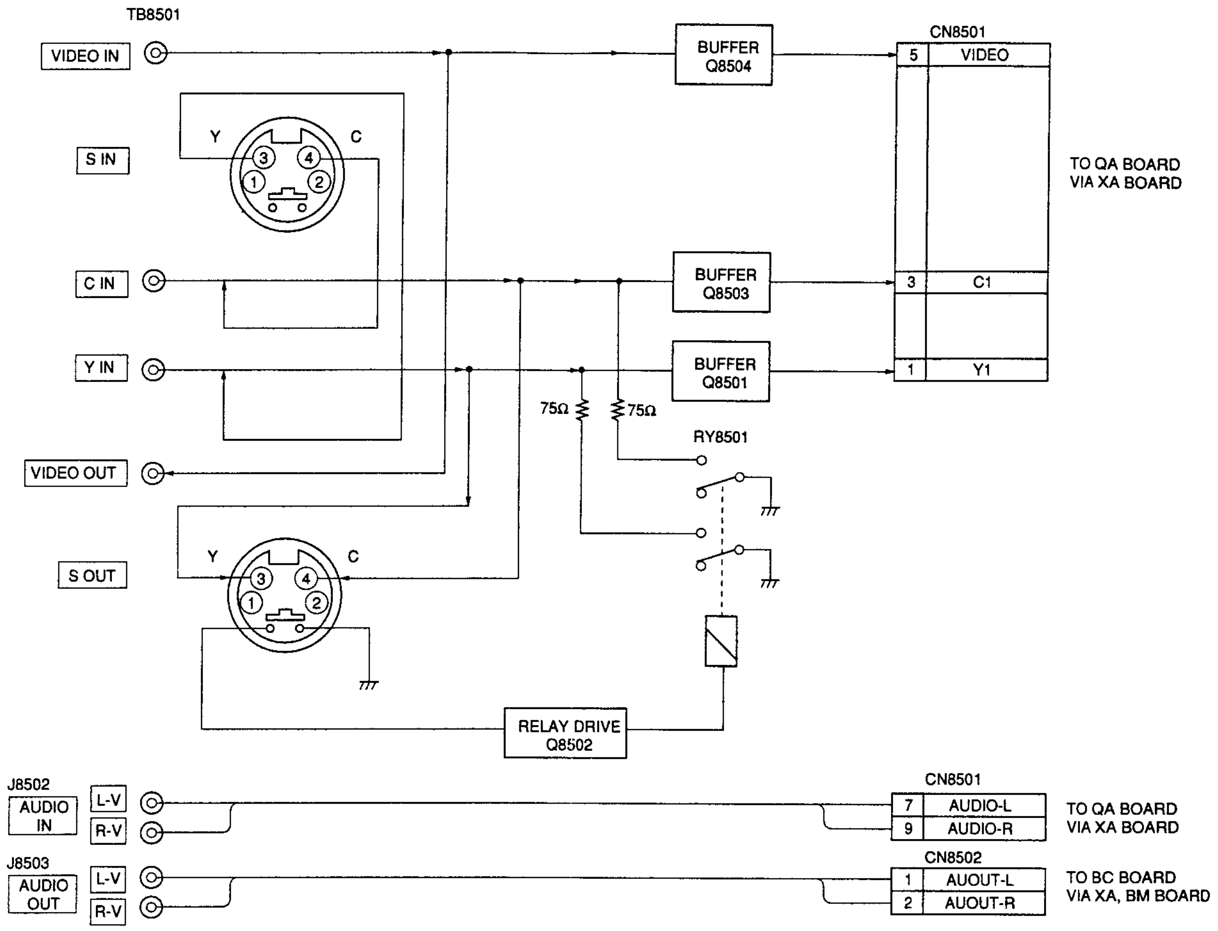
OVERALL BLOCK


TO BA BOARD
VIA XA, BM BOARDS
CN8201
FLT ON/OFF
C28
INPUT A
J8001
P/R-Y/PR
CN8001
R TERM
75
TO QB BOARD
VIA XA BOARD
CVID-QBQA
C3
IC8206
INPUT SWITCH
IN0
IN1
OUT
CONT
EN
G/Y
CN8002
G TERM
Y-QBQA
C6
IC8207
INPUT SWITCH
B/B-Y/PB
CN8003
B TERM
C-QBQA
C9
IC8208
INPUT SWITCH
TO IFB-B, IFB-C BOARDS
VIA XA BOARD
RY8201
RY8202
RY8203
RED-IFBQA
A5
B5
GRN-IFBQA
A8
B8
BLUE-IFBQA
A11
B11
RY8204
RY8205
RY8206
BUFFER
Q8401
Q8402
Q8403
FL8401
FL8402
FL8403
LPF
Q8404
Q8405
Q8406
IC8401
IC8402
IC8403
RELAY
DRIVE
Q8203.8204
IC8215
IC8216
IC8217
RED-QABA
A18
B18
C18
GRN-QABA
A22
B22
C22
BLUE-QABA
A26
B26
C26
J501
J502
J503
TO M, IFB-B BOARDS
VIA XA, BM BOARDS
B-SEL
B20
TO M, IFB-C BOARDS
VIA XA, BM BOARDS
C-SEL
C20
IC8203
RELAY
DRIVER
Q8201,8202
TO BA BOARD
VIA, XA, BM BOARDS
CV/OTHER
B24
SV/OTHER
C24
IC8204
BC/OTHER
2/2
BC-FV/OTHER
2/2
IC8202
BC-FV-IN/OTHER
2/2
TO M, IFB-B BOARDS
VIA XA, BM BOARDS
IN/OUT-B
A20
TO M BOARD
VIA XA, BM BOARDS
FV/OTHER
A24
FV/OTHER
2/2
RELAY
DRIVER
Q8205,8206
RY8207
HC2-QABA
C16
VD2-QABA
C14
TO BA BOARD
VIA XA, BM BOARDS
IC8212
LATCH AMP
IN
OUT
SHDN
IC8213
LATCH AMP
IC8214
LATCH AMP
RED-QAIFB
A4
B4
GRN-QAIFB
A7
B7
BLUE-QAIFB
A10
B10
TO IFB-B BOARD
VIA XA BOARD
IC8201
+13.5V
9V REG
+9V
IC8205
+6.2V
5V REG
+5V
IC8008
BUFFER
HC-IFBQA
C12
VD-IFBQA
C13
HS2
VS2

QA BLOCK (1/2)

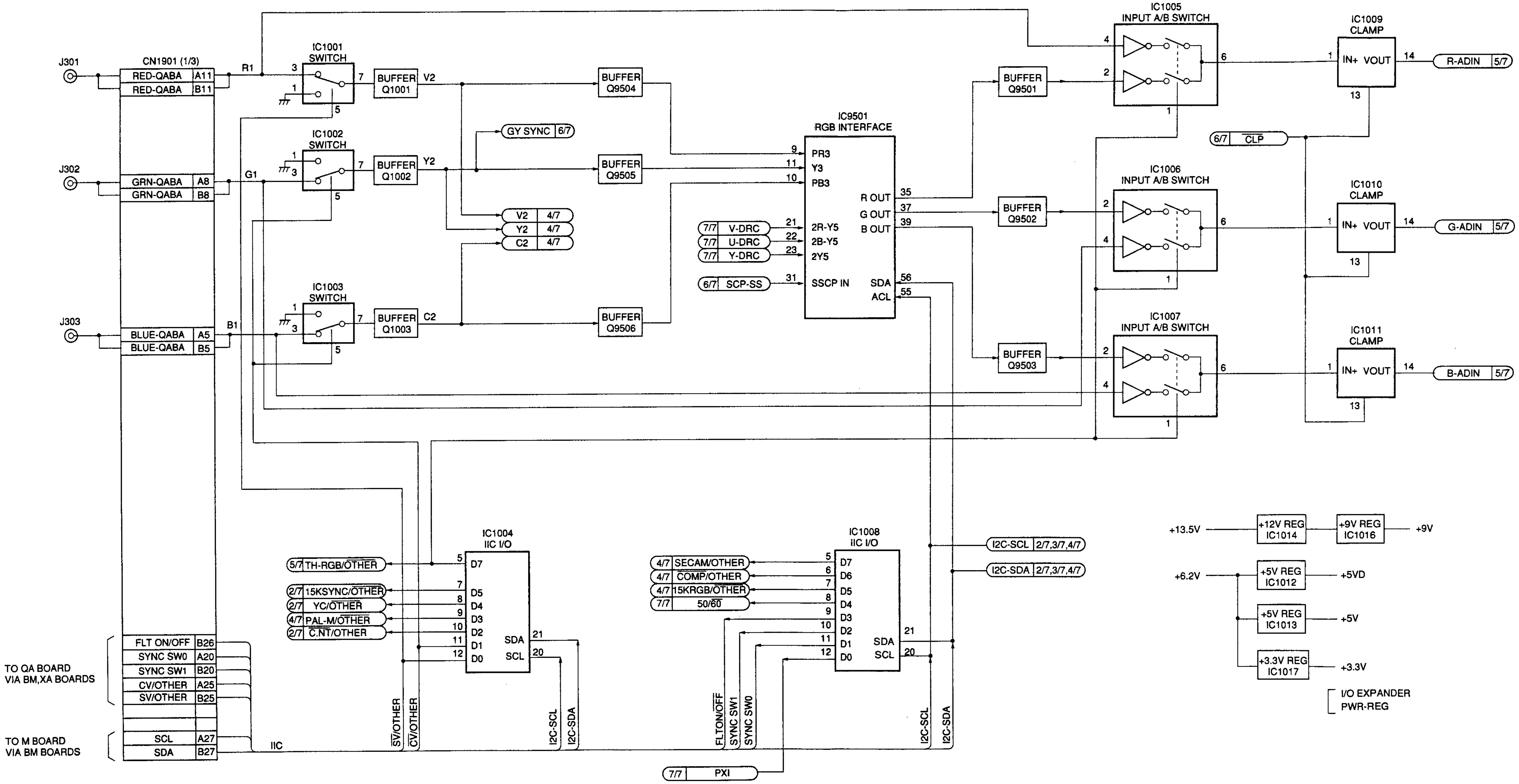

INPUT A
H SYNC/HD
VD
CN8004
V TERM
75
2
3
J8001
DET
Q8001,8005,8006
IC8003(2/2)
BUFFER
IC8005
COMPARATOR
IN2–
IN2+
IN1–
IN1+
OUT2
OUT1
VCC
IC8008(1/8–6/8)
BUFFER
HS2
VS2
1/2
IC8009
COMPARATOR
BUFFER
Q8016,8017
Q8011–8014
IC8007(1/2)
BUFFER
BUFFER
Q8015
CN8005
DET
Q8002,8007,8008
IC8003(1/2)
CN8201
B15 HC3–QABA
C30 SYNCSW1
C29 SYNCSW0
TO BA BOARD
VIA XA, BM BOARD
A12 HC-QAIFB
A13 VD-QAIFB
TO IFB-B BOARD
VIA XA BOARD
SW0
SW1
ENA
INA0
INA1
INA2
YA
YB
ENB
INB0
INB1
INB2
IC8010
INPUT SELECTOR
1/2 BC–FV/OTHER
POWER SW
Q8018–8020
+5V
L–V
R–V
J8002
J8003
IC8002
INPUT SELECTOR
X0
X1
X2
Y0
Y1
Y2
SW0
SW1
X
Y
AULI-V
AULI-IFB
AURI-V
ARRI-IFB
IC8004(1/2)
AUDIO AMP
IC8004(2/2)
AUDIO AMP
A32 AUL-QABC
C32 AUR-QABC
TO BC BOARD
VIA XA, BM BOARDS
AULI-IFB
AURI-IFB
A1 AUL-IFBQA
A2 AUR-IFBQA
TO IFB-B, IFB-C BOARDS
VIA XA, BM BOARDS
AULI-V
AURI-V
C1 AUL-QBQA
C2 AUR-QBQA
TO QB BOARD
VIA XA BOARD
1/2 FV/OTHER
1/2 BC/OTHER
IC8001
INPUT SELECTOR
X0
Z0
SWX
SWZ
X
Z
IC8006(1/2)
AUDIO AMP
IC8006(2/2)
AUDIO AMP
B1 AUL-QAIFB
B2 AUR-QAIFB
TO IFB-B BOARD
VIA XA, BM BOARDS
1/2 BC-FV-IN/OTHER

QA BLOCK (2/2)


TB8501
VIDEO IN
S IN
Y
C
C IN
Y IN
VIDEO OUT
S OUT
Y
C
BUFFER
Q8504
BUFFER
Q8503
BUFFER
Q8501
75Ω
75Ω
RY8501
RELAY DRIVE
Q8502
CN8501
5 VIDEO
3 C1
1 Y1
TO QA BOARD
VIA XA BOARD
J8502
AUDIO IN
L-V
R-V
J8503
AUDIO OUT
L-V
R-V
CN8501
7 AUDIO-L
9 AUDIO-R
TO QA BOARD
VIA XA BOARD
CN8502
1 AUOUT-L
2 AUOUT-R
TO BC BOARD
VIA XA, BM BOARD

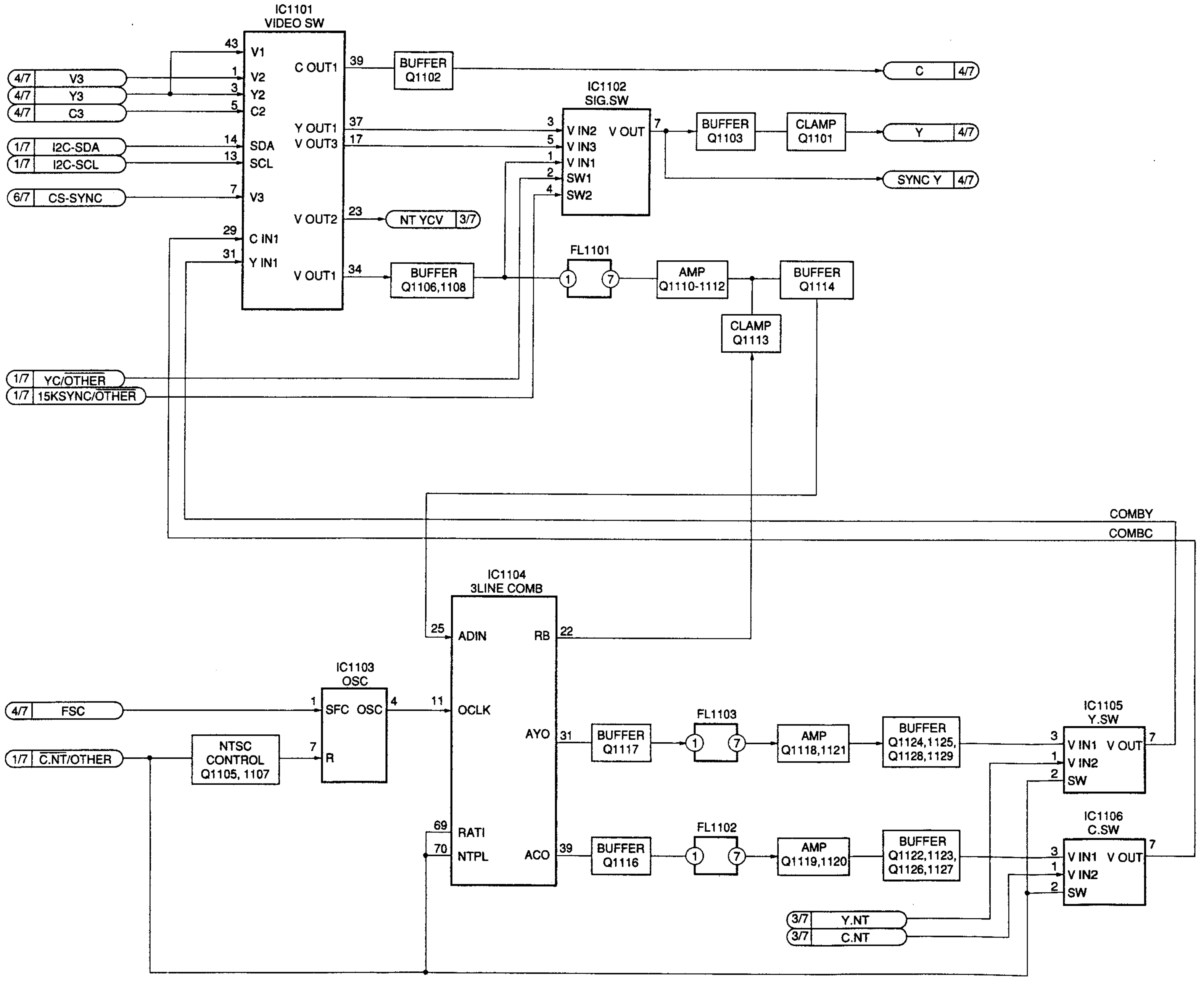
QB BLOCK

BA (1/7)

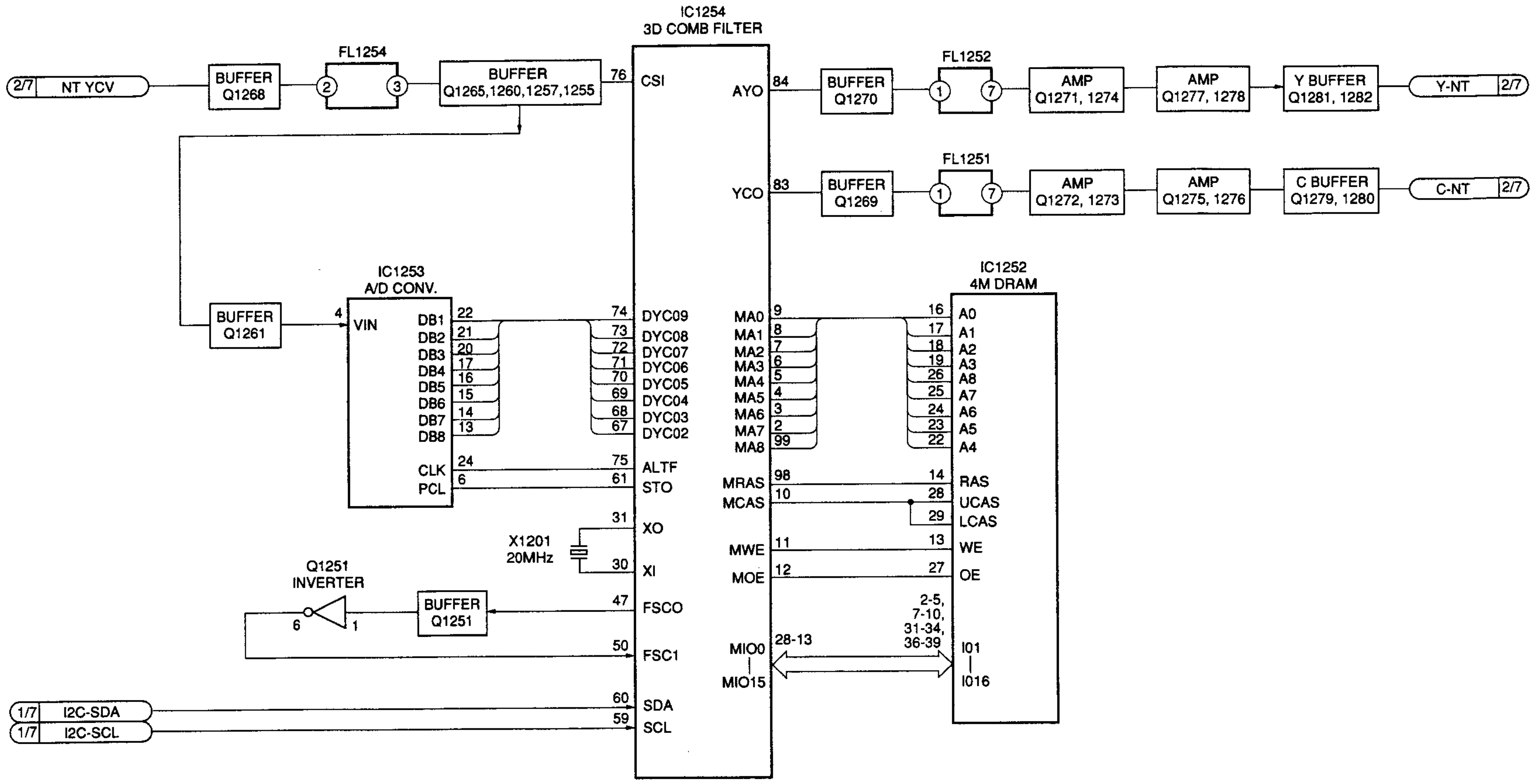

J301
J302
J303
CN1901 (1/3)
RED-QABA A11
RED-QABA B11
GRN-QABA A8
GRN-QABA B8
BLUE-QABA A5
BLUE-QABA B5
R1
G1
B1
IC1001 SWITCH
IC1002 SWITCH
IC1003 SWITCH
BUFFER Q1001
BUFFER Q1002
BUFFER Q1003
V2
Y2
C2
BUFFER Q9504
BUFFER Q9505
BUFFER Q9506
GY SYNC 6/7
V2 4/7
Y2 4/7
C2 4/7
IC9501 RGB INTERFACE
PR3
Y3
PB3
R OUT
G OUT
B OUT
2R-Y5
2B-Y5
2Y5
SSCP IN
SDA
ACL
7/7 V-DRC
7/7 U-DRC
7/7 Y-DRC
6/7 SCP-SS
BUFFER Q9501
BUFFER Q9502
BUFFER Q9503
IC1005 INPUT A/B SWITCH
IC1006 INPUT A/B SWITCH
IC1007 INPUT A/B SWITCH
6/7 CLP
IC1009 CLAMP
IC1010 CLAMP
IC1011 CLAMP
IN+ VOUT
R-ADIN 5/7
G-ADIN 5/7
B-ADIN 5/7
IC1004 IIC I/O
D7
D5
D4
D3
D2
D1
D0
SDA
SCL
5/7 TH-RGB/OTHER
2/7 15KSYNC/OTHER
2/7 YC/OTHER
4/7 PAL-M/OTHER
2/7 C.NT/OTHER
IC1008 IIC I/O
4/7 SECAM/OTHER
4/7 COMP/OTHER
4/7 15KRGB/OTHER
7/7 50/60
I2C-SCL 2/7,3/7,4/7
I2C-SDA 2/7,3/7,4/7
SV/OTHER
CV/OTHER
I2C-SCL
I2C-SDA
FLTON/OFF
SYNC SW1
SYNC SW0
7/7 PXI
IIC
FLT ON/OFF B26
SYNC SW0 A20
SYNC SW1 B20
CV/OTHER A25
SV/OTHER B25
SCL A27
SDA B27
TO QA BOARD VIA BM,XA BOARDS
TO M BOARD VIA BM BOARDS
+13.5V
+12V REG IC1014
+9V REG IC1016
+9V
+6.2V
+5V REG IC1012
+5VD
+5V REG IC1013
+5V
+3.3V REG IC1017
+3.3V
I/O EXPANDER
PWR-REG

BA BLOCK (1/7)

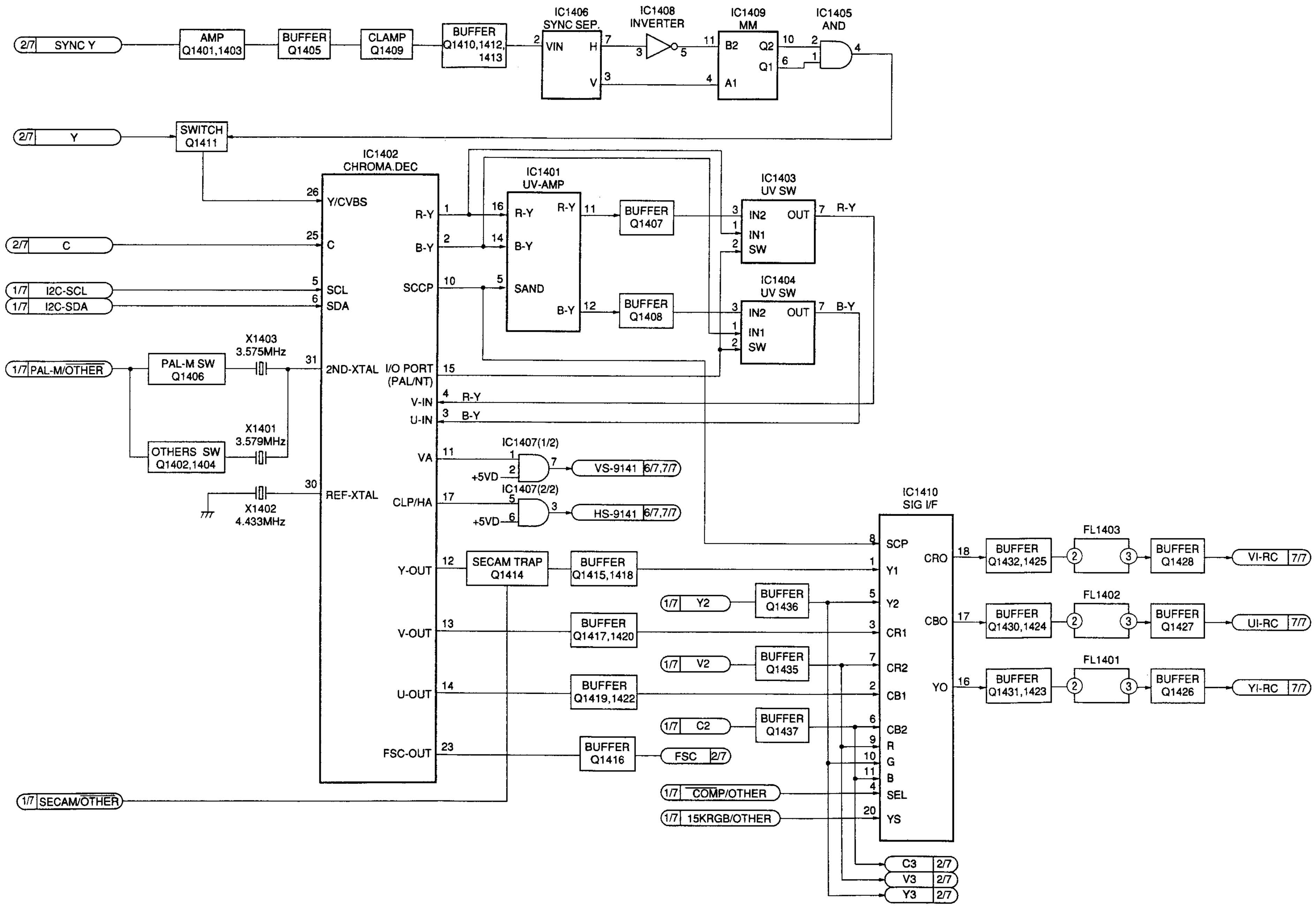
9-5


IC1101
VIDEO SW
V1
V2
Y2
C2
SDA
SCL
V3
C IN1
Y IN1
C OUT1
Y OUT1
V OUT3
V OUT2
V OUT1
43
1
3
5
14
13
7
29
31
39
37
17
23
34
4/7 V3
4/7 Y3
4/7 C3
1/7 I2C-SDA
1/7 I2C-SCL
6/7 CS-SYNC
BUFFER
Q1102
NT YCV 3/7
BUFFER
Q1106,1108
IC1102
SIG.SW
V IN2
V IN3
V IN1
SW1
SW2
V OUT
3
5
1
2
4
7
BUFFER
Q1103
CLAMP
Q1101
C 4/7
Y 4/7
SYNC Y 4/7
FL1101
AMP
Q1110-1112
BUFFER
Q1114
CLAMP
Q1113
1/7 YC/OTHER
1/7 15KSYNC/OTHER
COMBY
COMBC
IC1104
3LINE COMB
ADIN
RB
OCLK
AYO
RATI
NTPL
ACO
25
22
11
31
69
70
39
IC1103
OSC
SFC
OSC
R
4/7 FSC
1/7 C.NT/OTHER
NTSC
CONTROL
Q1105, 1107
BUFFER
Q1117
FL1103
AMP
Q1118,1121
BUFFER
Q1124,1125,
Q1128,1129
BUFFER
Q1116
FL1102
AMP
Q1119,1120
BUFFER
Q1122,1123,
Q1126,1127
IC1105
Y.SW
IC1106
C.SW
V IN1
V IN2
SW
V OUT
3/7 Y.NT
3/7 C.NT

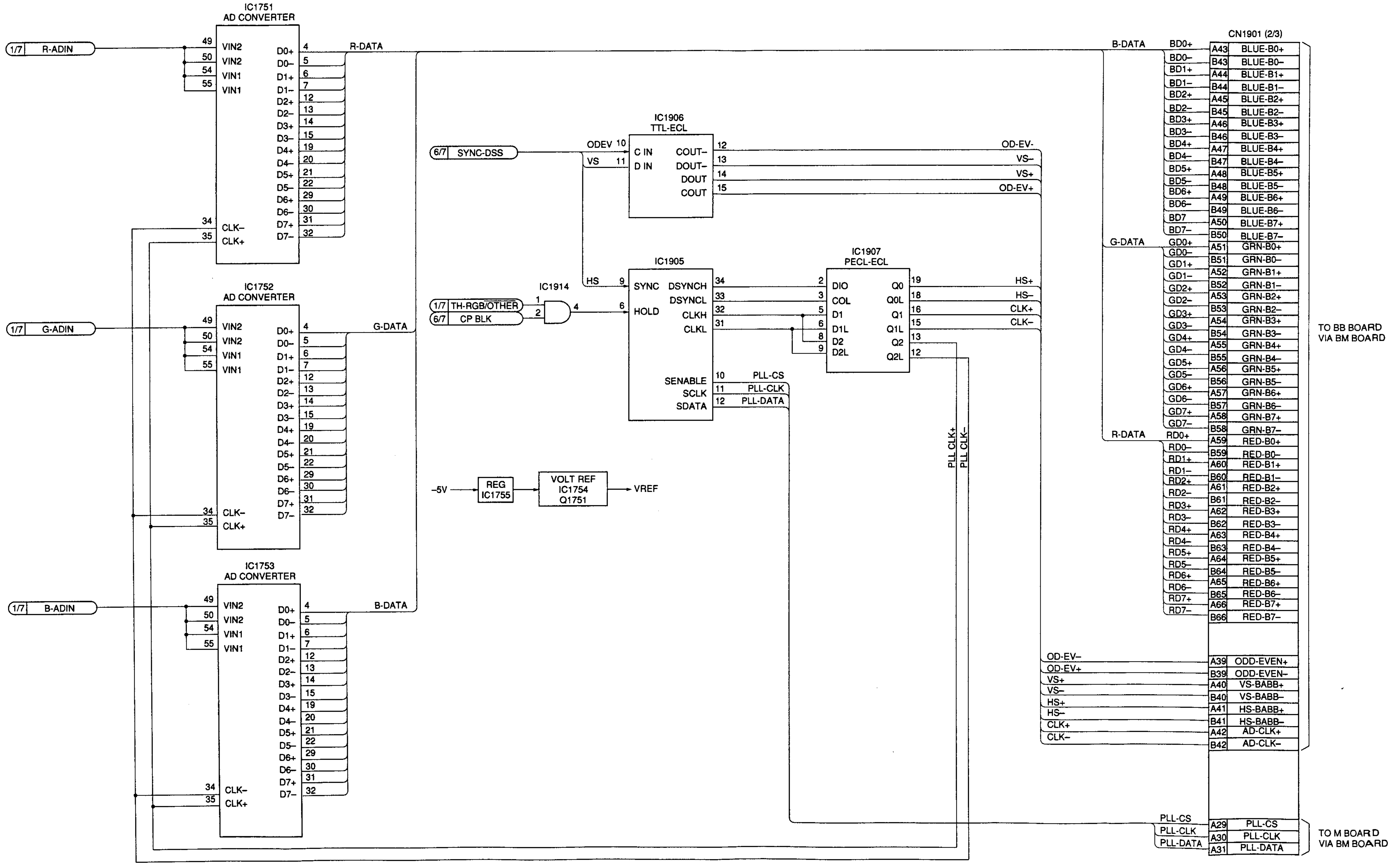
BA BLOCK (2/7)


IC1254
3D COMB FILTER
2/7
NT YCV
BUFFER
Q1268
FL1254
2
3
BUFFER
Q1265,1260,1257,1255
76
CSI
AYO
84
YCO
83
BUFFER
Q1270
FL1252
1
7
AMP
Q1271, 1274
AMP
Q1277, 1278
Y BUFFER
Q1281, 1282
Y-NT
2/7
BUFFER
Q1269
FL1251
1
7
AMP
Q1272, 1273
AMP
Q1275, 1276
C BUFFER
Q1279, 1280
C-NT
2/7
IC1253
A/D CONV.
BUFFER
Q1261
4
VIN
DB1 22
DB2 21
DB3 20
DB4 17
DB5 16
DB6 15
DB7 14
DB8 13
CLK 24
PCL 6
74 DYC09
73 DYC08
72 DYC07
71 DYC06
70 DYC05
69 DYC04
68 DYC03
67 DYC02
75 ALTF
61 STO
31 XO
X1201
20MHz
30 XI
Q1251
INVERTER
6
1
BUFFER
Q1251
47 FSCO
50 FSC1
1/7
I2C-SDA
1/7
I2C-SCL
60 SDA
59 SCL
MA0 9
MA1 8
MA2 7
MA3 6
MA4 5
MA5 4
MA6 3
MA7 2
MA8 99
MRAS 98
MCAS 10
MWE 11
MOE 12
MIO0
MIO15
28-13
IC1252
4M DRAM
16 A0
17 A1
18 A2
19 A3
26 A8
25 A7
24 A6
23 A5
22 A4
14 RAS
28 UCAS
29 LCAS
13 WE
27 OE
2-5,
7-10,
31-34,
36-39
I01
I016

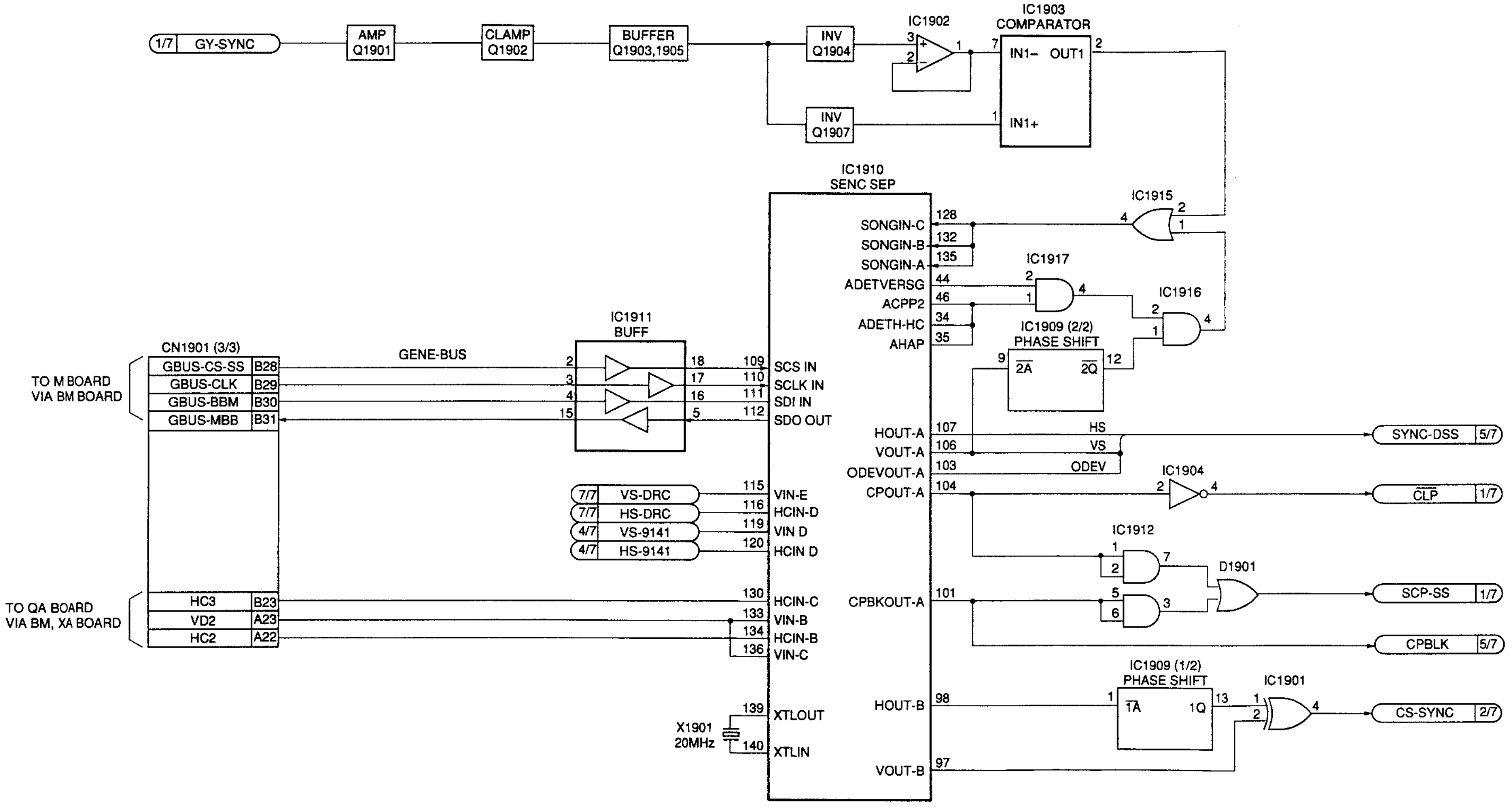
BA BLOCK (3/7)


2/7 SYNC Y
AMP Q1401,1403
BUFFER Q1405
CLAMP Q1409
BUFFER Q1410,1412, 1413
IC1406 SYNC SEP.
VIN H V
IC1408 INVERTER
IC1409 MM
B2 Q2 Q1 A1
IC1405 AND
2/7 Y
SWITCH Q1411
IC1402 CHROMA DEC
Y/CVBS
C
SCL
SDA
2ND-XTAL
REF-XTAL
R-Y
B-Y
SCCP
I/O PORT (PAL/NT)
V-IN
U-IN
VA
CLP/HA
Y-OUT
V-OUT
U-OUT
FSC-OUT
2/7 C
1/7 I2C-SCL
1/7 I2C-SDA
1/7 PAL-M/OTHER
PAL-M SW Q1406
X1403 3.575MHz
OTHERS SW Q1402,1404
X1401 3.579MHz
X1402 4.433MHz
IC1401 UV-AMP
R-Y B-Y SAND
BUFFER Q1407
BUFFER Q1408
IC1403 UV SW
IN2 OUT IN1 SW
R-Y
IC1404 UV SW
IN2 OUT IN1 SW
B-Y
R-Y
B-Y
IC1407(1/2)
+5VD
VS-9141 6/7,7/7
IC1407(2/2)
+5VD
HS-9141 6/7,7/7
SECAM TRAP Q1414
BUFFER Q1415,1418
BUFFER Q1417,1420
BUFFER Q1419,1422
BUFFER Q1416
FSC 2/7
1/7 Y2
BUFFER Q1436
1/7 V2
BUFFER Q1435
1/7 C2
BUFFER Q1437
1/7 COMP/OTHER
1/7 15KRGB/OTHER
1/7 SECAM/OTHER
IC1410 SIG I/F
SCP Y1 Y2 CR1 CR2 CB1 CB2 R G B SEL YS
CRO CBO YO
BUFFER Q1432,1425
BUFFER Q1430,1424
BUFFER Q1431,1423
FL1403
FL1402
FL1401
BUFFER Q1428
BUFFER Q1427
BUFFER Q1426
VI-RC 7/7
UI-RC 7/7
YI-RC 7/7
C3 2/7
V3 2/7
Y3 2/7

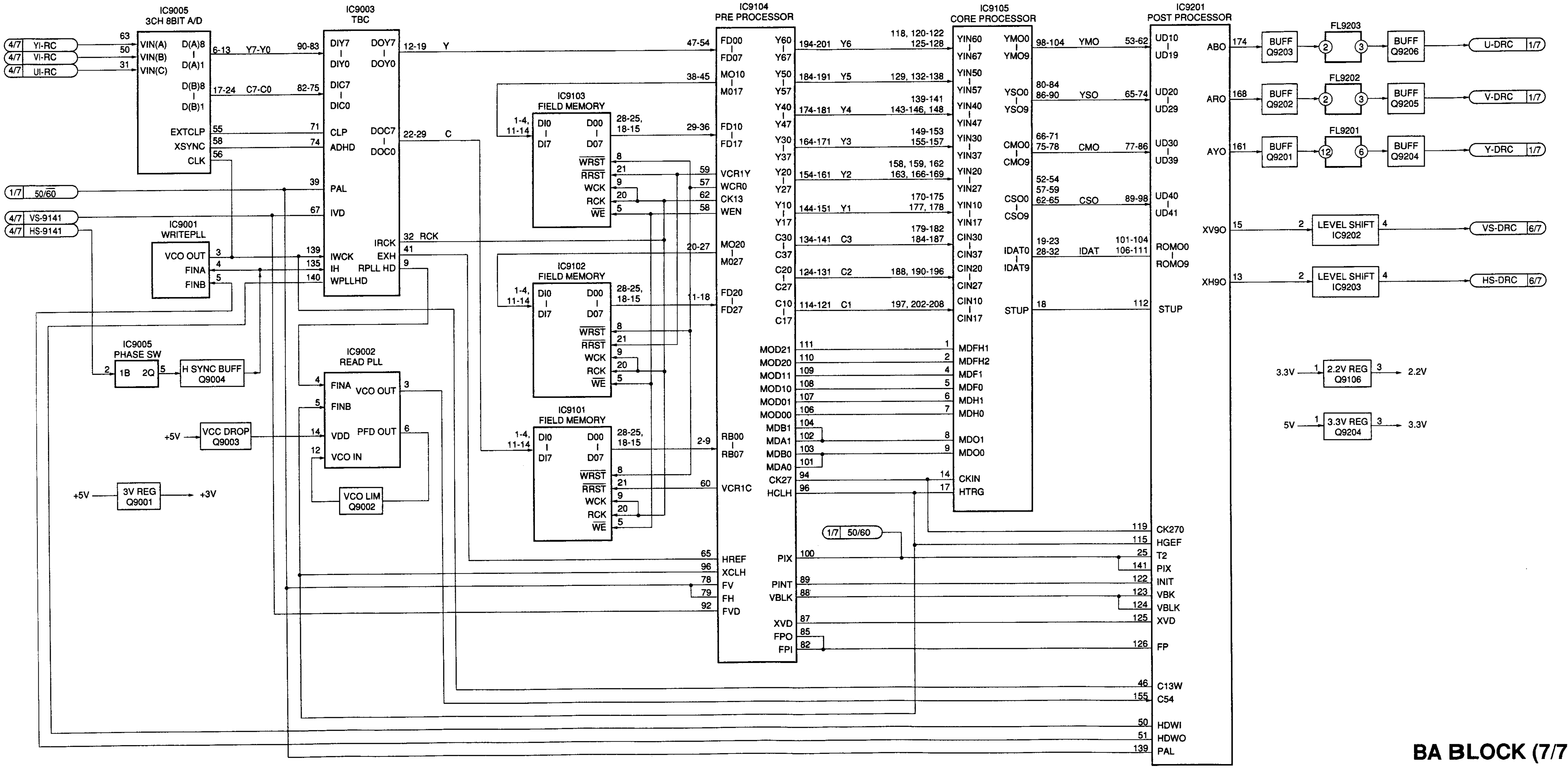
BA BLOCK (4/7)


IC1751
AD CONVERTER
IC1752
AD CONVERTER
IC1753
AD CONVERTER
1/7 R-ADIN
1/7 G-ADIN
1/7 B-ADIN
VIN2
VIN1
CLK–
CLK+
D0+
D0–
D1+
D1–
D2+
D2–
D3+
D3–
D4+
D4–
D5+
D5–
D6+
D6–
D7+
D7–
R-DATA
G-DATA
B-DATA
IC1906
TTL-ECL
6/7 SYNC-DSS
ODEV
VS
C IN
D IN
COUT–
DOUT–
DOUT
COUT
OD-EV-
VS–
VS+
OD-EV+
IC1905
IC1914
1/7 TH-RGB/OTHER
6/7 CP BLK
HS
SYNC
HOLD
DSYNCH
DSYNCL
CLKH
CLKL
SENABLE
SCLK
SDATA
PLL-CS
PLL-CLK
PLL-DATA
IC1907
PECL-ECL
DIO
COL
D1
D1L
D2
D2L
Q0
Q0L
Q1
Q1L
Q2
Q2L
HS+
HS–
CLK+
CLK–
PLL CLK+
PLL CLK–
–5V
REG
IC1755
VOLT REF
IC1754
Q1751
VREF
CN1901 (2/3)
B-DATA
G-DATA
R-DATA
A43 BLUE-B0+
B43 BLUE-B0–
A44 BLUE-B1+
B44 BLUE-B1–
A45 BLUE-B2+
B45 BLUE-B2–
A46 BLUE-B3+
B46 BLUE-B3–
A47 BLUE-B4+
B47 BLUE-B4–
A48 BLUE-B5+
B48 BLUE-B5–
A49 BLUE-B6+
B49 BLUE-B6–
A50 BLUE-B7+
B50 BLUE-B7–
A51 GRN-B0+
B51 GRN-B0–
A52 GRN-B1+
B52 GRN-B1–
A53 GRN-B2+
B53 GRN-B2–
A54 GRN-B3+
B54 GRN-B3–
A55 GRN-B4+
B55 GRN-B4–
A56 GRN-B5+
B56 GRN-B5–
A57 GRN-B6+
B57 GRN-B6–
A58 GRN-B7+
B58 GRN-B7–
A59 RED-B0+
B59 RED-B0–
A60 RED-B1+
B60 RED-B1–
A61 RED-B2+
B61 RED-B2–
A62 RED-B3+
B62 RED-B3–
A63 RED-B4+
B63 RED-B4–
A64 RED-B5+
B64 RED-B5–
A65 RED-B6+
B65 RED-B6–
A66 RED-B7+
B66 RED-B7–
A39 ODD-EVEN+
B39 ODD-EVEN–
A40 VS-BABB+
B40 VS-BABB–
A41 HS-BABB+
B41 HS-BABB–
A42 AD-CLK+
B42 AD-CLK–
A29 PLL-CS
A30 PLL-CLK
A31 PLL-DATA
TO BB BOARD
VIA BM BOARD
TO M BOARD
VIA BM BOARD

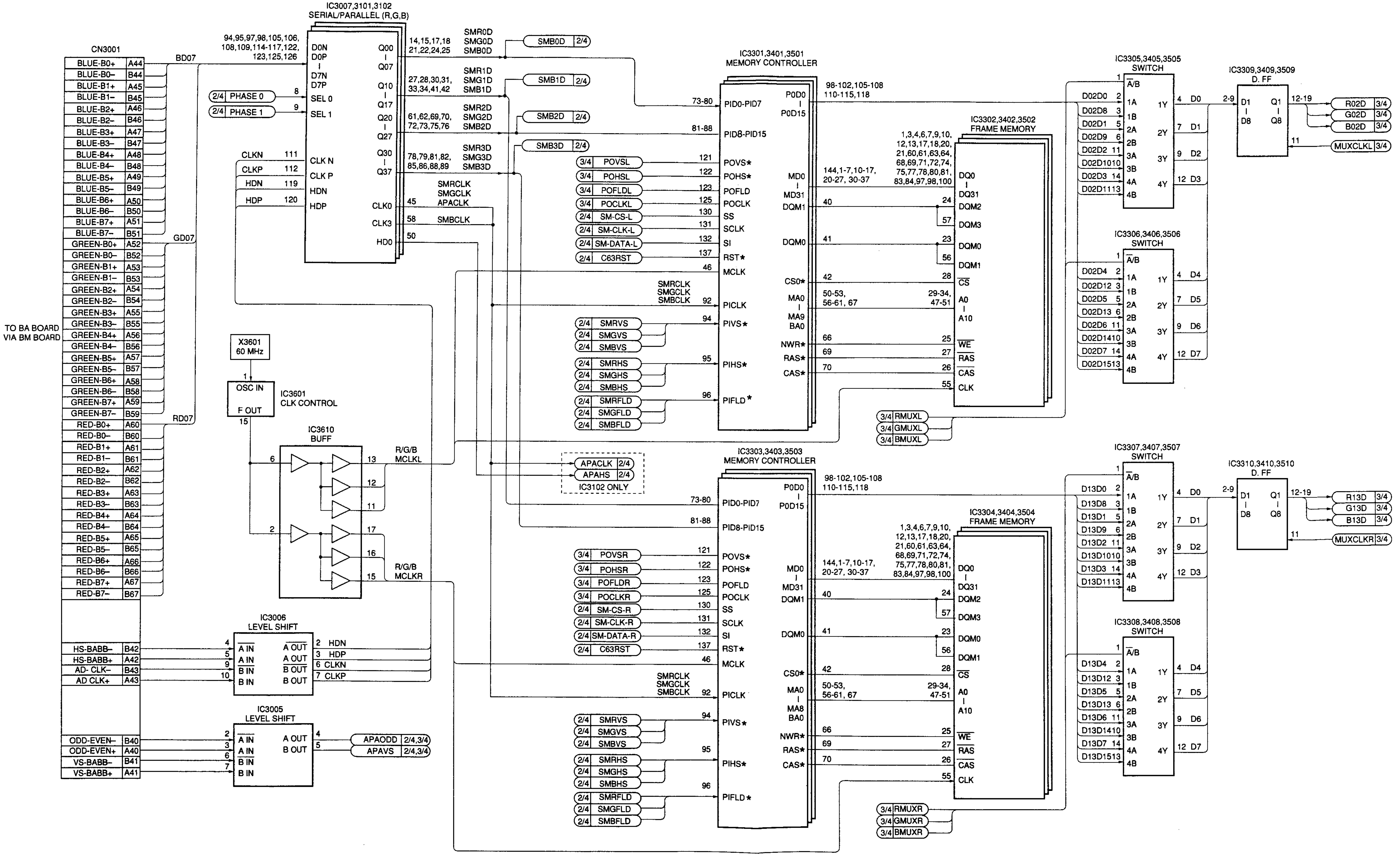
BA BLOCK (5/7)


1/7 GY-SYNC
AMP Q1901
CLAMP Q1902
BUFFER Q1903,1905
INV Q1904
INV Q1907
IC1902
3 + 2 − 1
IC1903 COMPARATOR
7 IN1− OUT1 2
1 IN1+
IC1910 SENC SEP
128 SONGIN-C
132 SONGIN-B
135 SONGIN-A
44 ADETVERSG
46 ACPP2
34 ADETH-HC
35 AHAP
IC1915
IC1917
IC1916
IC1909 (2/2) PHASE SHIFT
9 2A 2Q 12
107 HOUT-A
106 VOUT-A
103 ODEVOUT-A
104 CPOUT-A
HS
VS
ODEV
SYNC-DSS 5/7
IC1904
CLP 1/7
IC1912
D1901
SCP-SS 1/7
101 CPBKOUT-A
CPBLK 5/7
IC1909 (1/2) PHASE SHIFT
1 1A 1Q 13
IC1901
98 HOUT-B
97 VOUT-B
CS-SYNC 2/7
CN1901 (3/3)
TO M BOARD VIA BM BOARD
GBUS-CS-SS B28
GBUS-CLK B29
GBUS-BBM B30
GBUS-MBB B31
GENE-BUS
IC1911 BUFF
109 SCS IN
110 SCLK IN
111 SDI IN
112 SDO OUT
7/7 VS-DRC
7/7 HS-DRC
4/7 VS-9141
4/7 HS-9141
115 VIN-E
116 HCIN-D
119 VIN D
120 HCIN D
TO QA BOARD VIA BM, XA BOARD
HC3 B23
VD2 A23
HC2 A22
130 HCIN-C
133 VIN-B
134 HCIN-B
136 VIN-C
X1901 20MHz
139 XTLOUT
140 XTLIN

BA BLOCK (6/7)

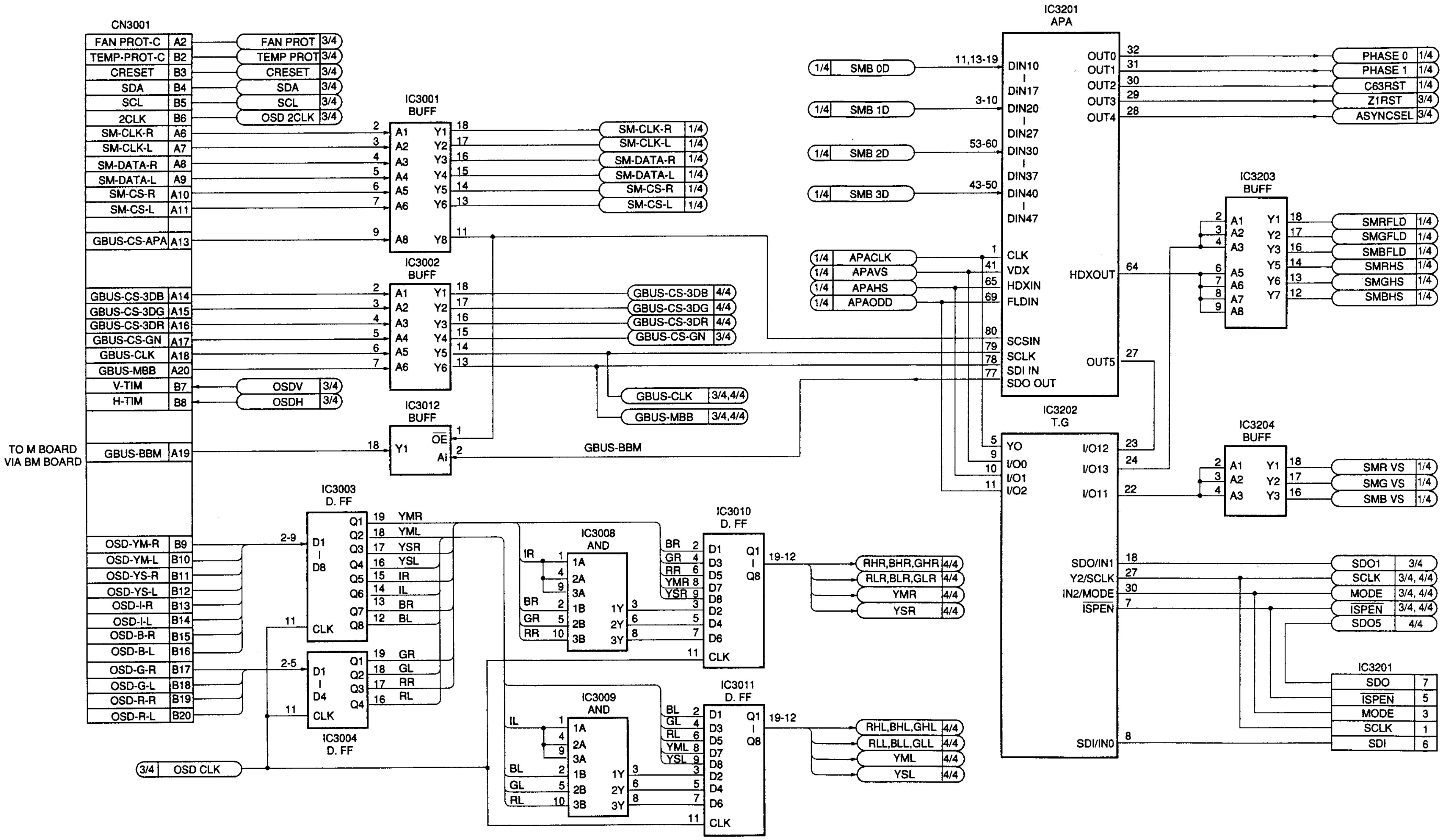

IC9005
3CH 8BIT A/D
VIN(A)
VIN(B)
VIN(C)
D(A)8
D(A)1
D(B)8
D(B)1
EXTCLP
XSYNC
CLK
4/7 YI-RC
4/7 VI-RC
4/7 UI-RC
1/7 50/60
4/7 VS-9141
4/7 HS-9141
Y7-Y0
C7-C0
IC9003
TBC
DIY7
DIY0
DIC7
DIC0
DOY7
DOY0
DOC7
DOC0
CLP
ADHD
PAL
IVD
IRCK
EXH
IWCK
IH
RPLL HD
WPLLHD
Y
C
RCK
IC9001
WRITEPLL
VCO OUT
FINA
FINB
IC9005
PHASE SW
1B 2Q
H SYNC BUFF
Q9004
IC9002
READ PLL
FINA
FINB
VCO OUT
PFD OUT
VDD
VCO IN
VCC DROP
Q9003
+5V
3V REG
Q9001
+3V
VCO LIM
Q9002
IC9103
FIELD MEMORY
IC9102
FIELD MEMORY
IC9101
FIELD MEMORY
DI0
DI7
D00
D07
WRST
RRST
WCK
RCK
WE
IC9104
PRE PROCESSOR
FD00
FD07
MO10
M017
FD10
FD17
VCR1Y
WCR0
CK13
WEN
MO20
M027
FD20
FD27
RB00
RB07
VCR1C
HREF
XCLH
FV
FH
FVD
Y60
Y67
Y50
Y57
Y40
Y47
Y30
Y37
Y20
Y27
Y10
Y17
C30
C37
C20
C27
C10
C17
MOD21
MOD20
MOD11
MOD10
MOD01
MOD00
MDB1
MDA1
MDB0
MDA0
CK27
HCLH
PIX
PINT
VBLK
XVD
FPO
FPI
Y6
Y5
Y4
Y3
Y2
Y1
C3
C2
C1
IC9105
CORE PROCESSOR
YIN60
YIN67
YIN50
YIN57
YIN40
YIN47
YIN30
YIN37
YIN20
YIN27
YIN10
YIN17
CIN30
CIN37
CIN20
CIN27
CIN10
CIN17
MDFH1
MDFH2
MDF1
MDF0
MDH1
MDH0
MDO1
MDO0
CKIN
HTRG
YMO0
YMO9
YSO0
YSO9
CMO0
CMO9
CSO0
CSO9
IDAT0
IDAT9
STUP
YMO
YSO
CMO
CSO
IDAT
1/7 50/60
IC9201
POST PROCESSOR
UD10
UD19
UD20
UD29
UD30
UD39
UD40
UD41
ROMO0
ROMO9
STUP
CK270
HGEF
T2
PIX
INIT
VBK
VBLK
XVD
FP
C13W
C54
HDWI
HDWO
PAL
ABO
ARO
AYO
XV9O
XH9O
BUFF
Q9203
Q9202
Q9201
FL9203
FL9202
FL9201
BUFF
Q9206
Q9205
Q9204
U-DRC 1/7
V-DRC 1/7
Y-DRC 1/7
LEVEL SHIFT
IC9202
LEVEL SHIFT
IC9203
VS-DRC 6/7
HS-DRC 6/7
3.3V
2.2V REG
Q9106
2.2V
5V
3.3V REG
Q9204
3.3V

BA BLOCK (7/7)

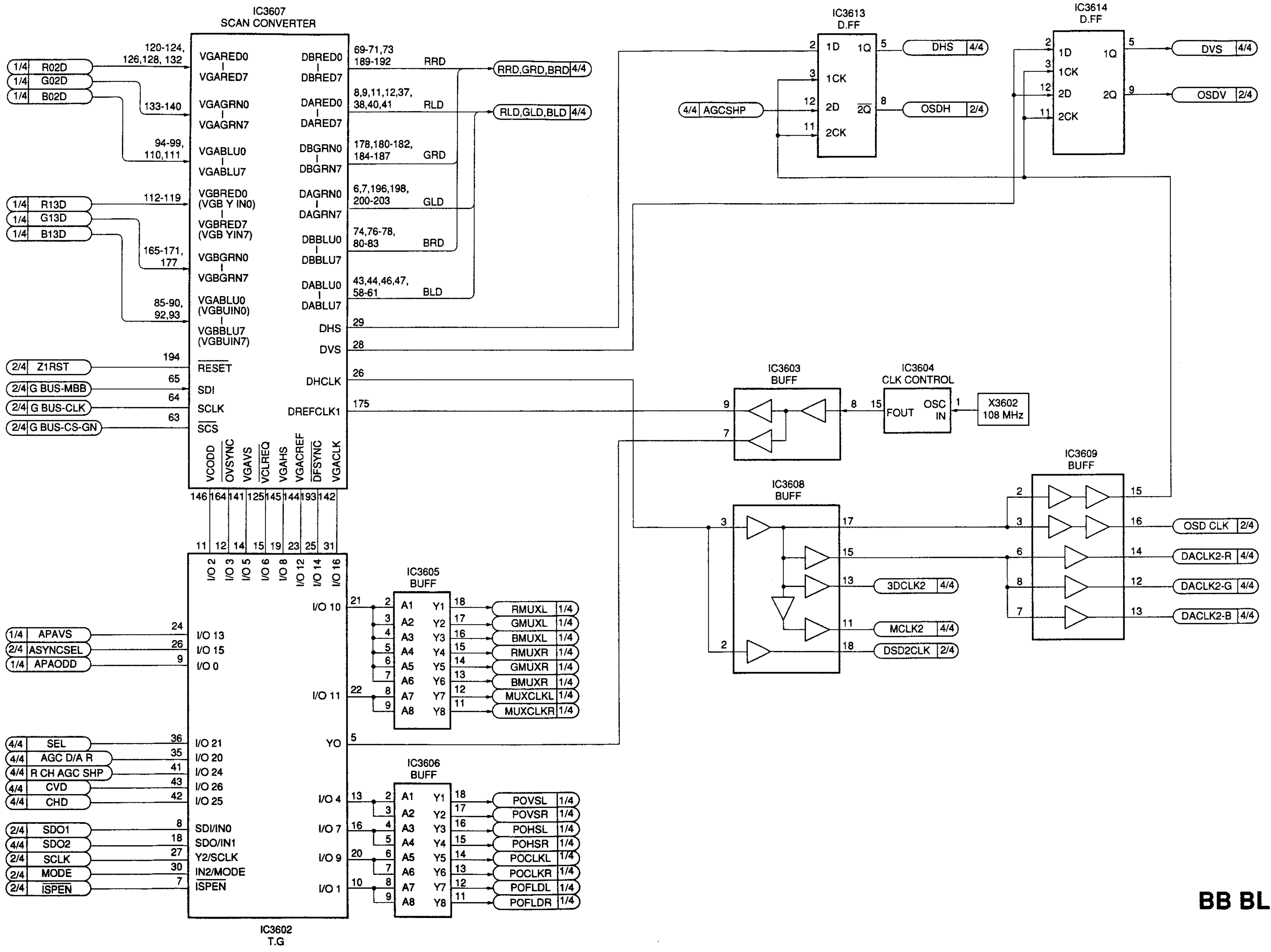

CN3001
TO BA BOARD VIA BM BOARD
BLUE-B0+ A44
BLUE-B0– B44
BLUE-B1+ A45
BLUE-B1– B45
BLUE-B2+ A46
BLUE-B2– B46
BLUE-B3+ A47
BLUE-B3– B47
BLUE-B4+ A48
BLUE-B4– B48
BLUE-B5+ A49
BLUE-B5– B49
BLUE-B6+ A50
BLUE-B6– B50
BLUE-B7+ A51
BLUE-B7– B51
GREEN-B0+ A52
GREEN-B0– B52
GREEN-B1+ A53
GREEN-B1– B53
GREEN-B2+ A54
GREEN-B2– B54
GREEN-B3+ A55
GREEN-B3– B55
GREEN-B4+ A56
GREEN-B4– B56
GREEN-B5+ A57
GREEN-B5– B57
GREEN-B6+ A58
GREEN-B6– B58
GREEN-B7+ A59
GREEN-B7– B59
RED-B0+ A60
RED-B0– B60
RED-B1+ A61
RED-B1– B61
RED-B2+ A62
RED-B2– B62
RED-B3+ A63
RED-B3– B63
RED-B4+ A64
RED-B4– B64
RED-B5+ A65
RED-B5– B65
RED-B6+ A66
RED-B6– B66
RED-B7+ A67
RED-B7– B67
HS-BABB– B42
HS-BABB+ A42
AD- CLK– B43
AD CLK+ A43
ODD-EVEN– B40
ODD-EVEN+ A40
VS-BABB– B41
VS-BABB+ A41
BD07
GD07
RD07
IC3007,3101,3102 SERIAL/PARALLEL (R,G,B)
94,95,97,98,105,106, 108,109,114-117,122, 123,125,126
D0N D0P I D7N D7P
SEL 0
SEL 1
CLK N
CLK P
HDN
HDP
Q00 I Q07
Q10 I Q17
Q20 I Q27
Q30 I Q37
CLK0
CLK3
HD0
2/4 PHASE 0
2/4 PHASE 1
CLKN 111
CLKP 112
HDN 119
HDP 120
14,15,17,18 21,22,24,25
27,28,30,31, 33,34,41,42
61,62,69,70, 72,73,75,76
78,79,81,82, 85,86,88,89
SMR0D SMG0D SMB0D
SMR1D SMG1D SMB1D
SMR2D SMG2D SMB2D
SMR3D SMG3D SMB3D
SMB0D 2/4
SMB1D 2/4
SMB2D 2/4
SMB3D 2/4
SMRCLK SMGCLK APACLK
SMBCLK
45
58
50
X3601 60 MHz
IC3601 CLK CONTROL
OSC IN
F OUT
IC3610 BUFF
R/G/B MCLKL
R/G/B MCLKR
APACLK 2/4
APAHS 2/4
IC3102 ONLY
IC3006 LEVEL SHIFT
A IN
B IN
A OUT
B OUT
2 HDN
3 HDP
6 CLKN
7 CLKP
IC3005 LEVEL SHIFT
APAODD 2/4,3/4
APAVS 2/4,3/4
IC3301,3401,3501 MEMORY CONTROLLER
IC3303,3403,3503 MEMORY CONTROLLER
PID0-PID7 73-80
PID8-PID15 81-88
POVS★ POHS★ POFLD POCLK SS SCLK SI RST★ MCLK PICLK PIVS★ PIHS★ PIFLD★
P0D0 I P0D15
MD0 I MD31
DQM1 DQM0 CS0★ MA0 I MA9 BA0 NWR★ RAS★ CAS★
MA0 I MA8 BA0
98-102,105-108 110-115,118
144,1-7,10-17, 20-27, 30-37
50-53, 56-61, 67
3/4 POVSL
3/4 POHSL
3/4 POFLDL
3/4 POCLKL
2/4 SM-CS-L
2/4 SM-CLK-L
2/4 SM-DATA-L
2/4 C63RST
3/4 POVSR
3/4 POHSR
3/4 POFLDR
3/4 POCLKR
2/4 SM-CS-R
2/4 SM-CLK-R
2/4 SM-DATA-R
2/4 C63RST
2/4 SMRVS
2/4 SMGVS
2/4 SMBVS
2/4 SMRHS
2/4 SMGHS
2/4 SMBHS
2/4 SMRFLD
2/4 SMGFLD
2/4 SMBFLD
IC3302,3402,3502 FRAME MEMORY
IC3304,3404,3504 FRAME MEMORY
1,3,4,6,7,9,10, 12,13,17,18,20, 21,60,61,63,64, 68,69,71,72,74, 75,77,78,80,81, 83,84,97,98,100
DQ0 I DQ31
DQM2 DQM3 DQM0 DQM1 CS A0 I A10 WE RAS CAS CLK
29-34, 47-51
3/4 RMUXL
3/4 GMUXL
3/4 BMUXL
3/4 RMUXR
3/4 GMUXR
3/4 BMUXR
IC3305,3405,3505 SWITCH
IC3306,3406,3506 SWITCH
IC3307,3407,3507 SWITCH
IC3308,3408,3508 SWITCH
A/B 1A 1B 2A 2B 3A 3B 4A 4B 1Y 2Y 3Y 4Y
D02D0 D02D8 D02D1 D02D9 D02D2 D02D10 D02D3 D02D11
D02D4 D02D12 D02D5 D02D13 D02D6 D02D14 D02D7 D02D15
D13D0 D13D8 D13D1 D13D9 D13D2 D13D10 D13D3 D13D11
D13D4 D13D12 D13D5 D13D13 D13D6 D13D14 D13D7 D13D15
D0 D1 D2 D3 D4 D5 D6 D7
IC3309,3409,3509 D. FF
IC3310,3410,3510 D. FF
D1 I D8
Q1 I Q8
2-9
12-19
R02D 3/4
G02D 3/4
B02D 3/4
MUXCLKL 3/4
R13D 3/4
G13D 3/4
B13D 3/4
MUXCLKR 3/4

BB BLOCK (1/4)

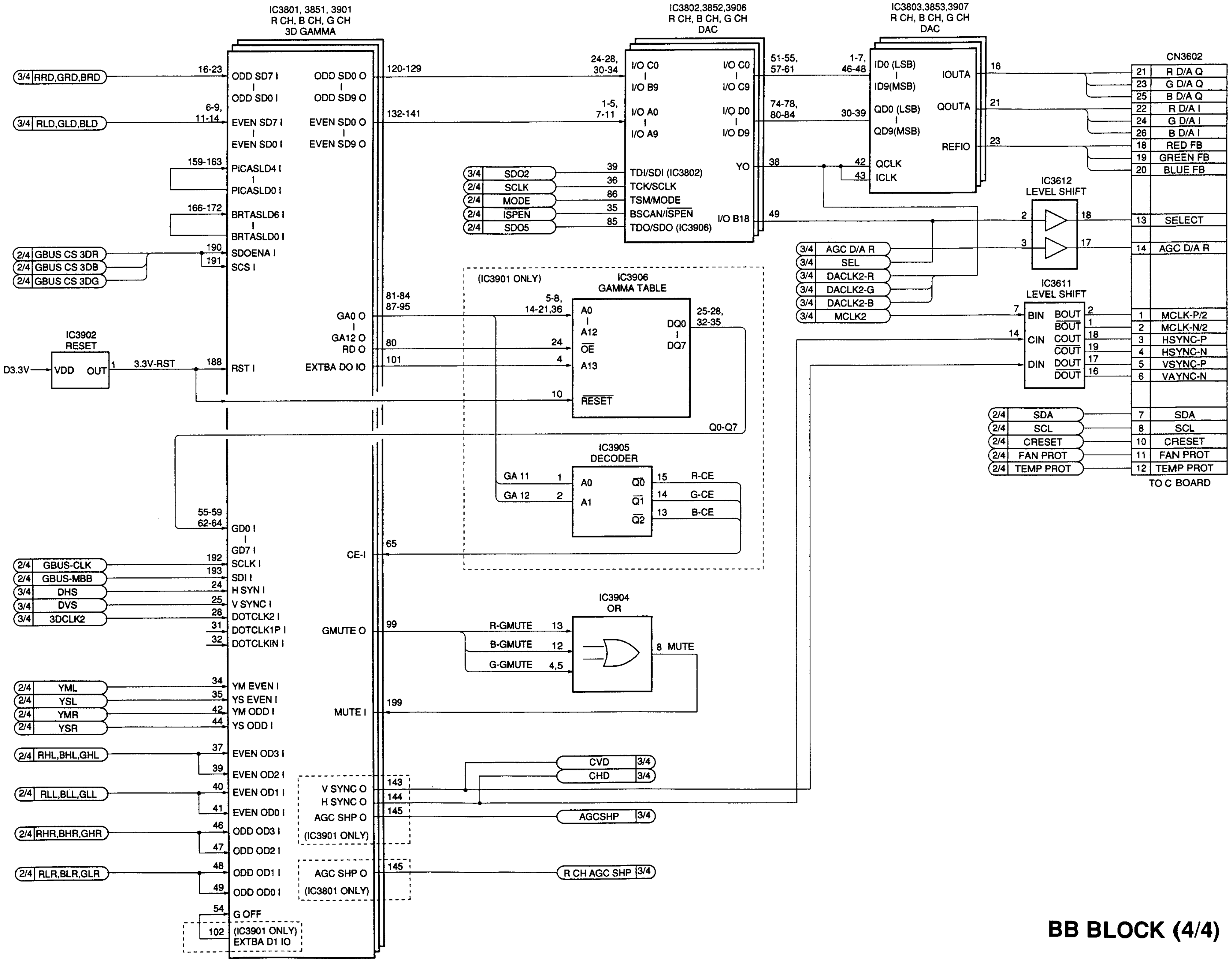
VPL-FE100U/FE100E/FE100M


CN3001
FAN PROT-C A2
TEMP-PROT-C B2
CRESET B3
SDA B4
SCL B5
2CLK B6
SM-CLK-R A6
SM-CLK-L A7
SM-DATA-R A8
SM-DATA-L A9
SM-CS-R A10
SM-CS-L A11
GBUS-CS-APA A13
GBUS-CS-3DB A14
GBUS-CS-3DG A15
GBUS-CS-3DR A16
GBUS-CS-GN A17
GBUS-CLK A18
GBUS-MBB A20
V-TIM B7
H-TIM B8
GBUS-BBM A19
TO M BOARD VIA BM BOARD
OSD-YM-R B9
OSD-YM-L B10
OSD-YS-R B11
OSD-YS-L B12
OSD-I-R B13
OSD-I-L B14
OSD-B-R B15
OSD-B-L B16
OSD-G-R B17
OSD-G-L B18
OSD-R-R B19
OSD-R-L B20
FAN PROT 3/4
TEMP PROT 3/4
CRESET 3/4
SDA 3/4
SCL 3/4
OSD 2CLK 3/4
OSDV 3/4
OSDH 3/4
IC3001 BUFF
IC3002 BUFF
IC3012 BUFF
OE
GBUS-BBM
SM-CLK-R 1/4
SM-CLK-L 1/4
SM-DATA-R 1/4
SM-DATA-L 1/4
SM-CS-R 1/4
SM-CS-L 1/4
GBUS-CS-3DB 4/4
GBUS-CS-3DG 4/4
GBUS-CS-3DR 4/4
GBUS-CS-GN 3/4
GBUS-CLK 3/4,4/4
GBUS-MBB 3/4,4/4
IC3003 D. FF
IC3004 D. FF
YMR YML YSR YSL IR IL BR BL
GR GL RR RL
3/4 OSD CLK
IC3008 AND
IC3009 AND
IC3010 D. FF
IC3011 D. FF
RHR,BHR,GHR 4/4
RLR,BLR,GLR 4/4
YMR 4/4
YSR 4/4
RHL,BHL,GHL 4/4
RLL,BLL,GLL 4/4
YML 4/4
YSL 4/4
1/4 SMB 0D
1/4 SMB 1D
1/4 SMB 2D
1/4 SMB 3D
1/4 APACLK
1/4 APAVS
1/4 APAHS
1/4 APAODD
IC3201 APA
DIN10 DIN17 DIN20 DIN27 DIN30 DIN37 DIN40 DIN47
CLK VDX HDXIN FLDIN
SCSIN SCLK SDI IN SDO OUT
OUT0 OUT1 OUT2 OUT3 OUT4
HDXOUT
OUT5
PHASE 0 1/4
PHASE 1 1/4
C63RST 1/4
Z1RST 3/4
ASYNCSEL 3/4
IC3203 BUFF
SMRFLD 1/4
SMGFLD 1/4
SMBFLD 1/4
SMRHS 1/4
SMGHS 1/4
SMBHS 1/4
IC3202 T.G
YO I/O0 I/O1 I/O2
I/O12 I/O13 I/O11
SDO/IN1
Y2/SCLK
IN2/MODE
ISPEN
SDI/IN0
IC3204 BUFF
SMR VS 1/4
SMG VS 1/4
SMB VS 1/4
SDO1 3/4
SCLK 3/4, 4/4
MODE 3/4, 4/4
ISPEN 3/4, 4/4
SDO5 4/4
IC3201
SDO 7
ISPEN 5
MODE 3
SCLK 1
SDI 6

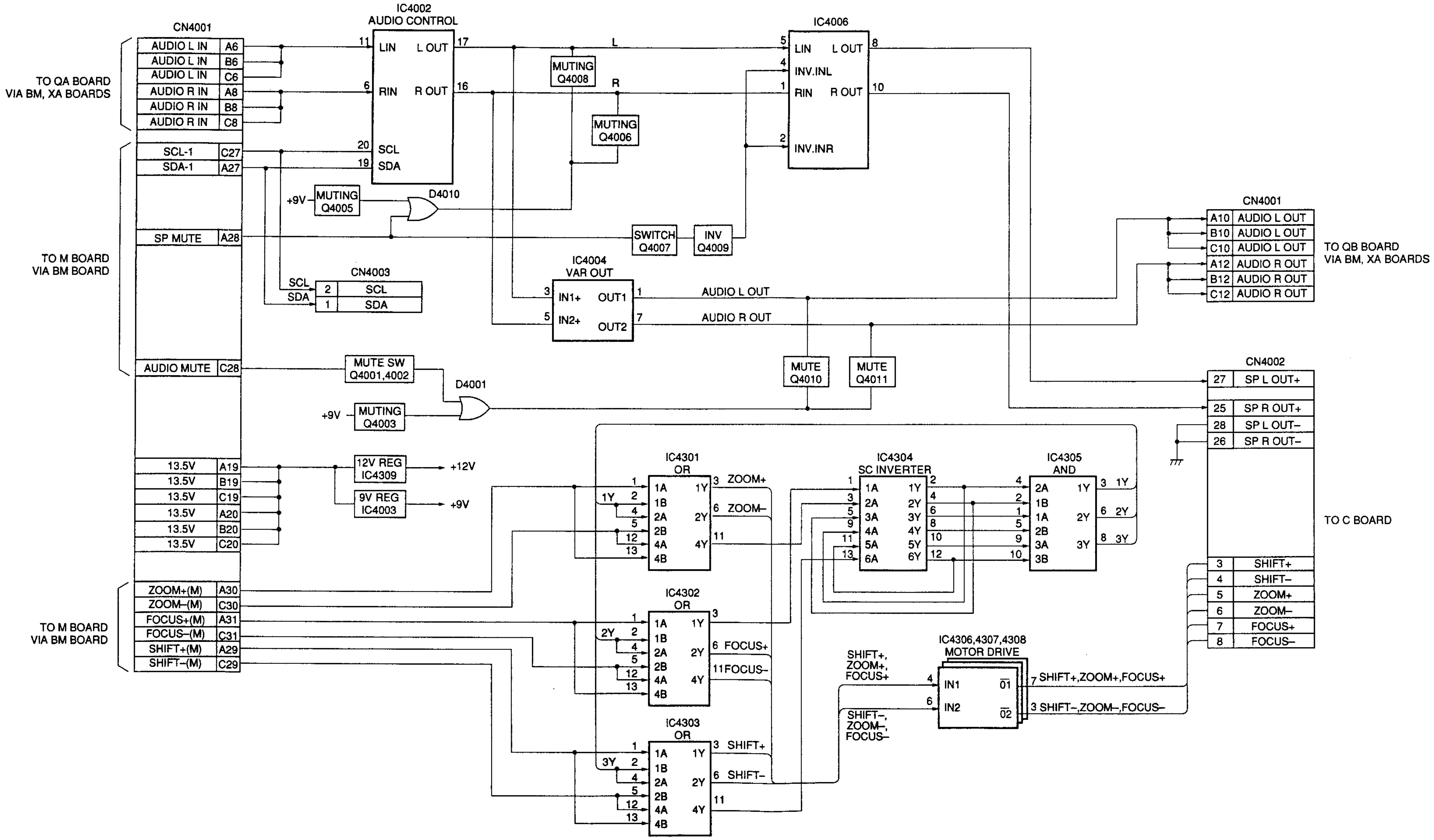
BB BLOCK (2/4)


IC3607
SCAN CONVERTER
1/4 R02D
1/4 G02D
1/4 B02D
120-124, 126,128, 132
133-140
94-99, 110,111
1/4 R13D
1/4 G13D
1/4 B13D
112-119
165-171, 177
85-90, 92,93
VGAREDO
VGARED7
VGAGRN0
VGAGRN7
VGABLU0
VGABLU7
VGBRED0 (VGB Y IN0)
VGBRED7 (VGB YIN7)
VGBGRN0
VGBGRN7
VGABLU0 (VGBUIN0)
VGBBLU7 (VGBUIN7)
DBRED0
DBRED7
DARED0
DARED7
DBGRN0
DBGRN7
DAGRN0
DAGRN7
DBBLU0
DBBLU7
DABLU0
DABLU7
DHS
DVS
DHCLK
DREFCLK1
69-71,73 189-192
RRD
8,9,11,12,37, 38,40,41
RLD
178,180-182, 184-187
GRD
6,7,196,198, 200-203
GLD
74,76-78, 80-83
BRD
43,44,46,47, 58-61
BLD
29
28
26
175
RRD,GRD,BRD 4/4
RLD,GLD,BLD 4/4
194
2/4 Z1RST
RESET
2/4 G BUS-MBB
65
SDI
2/4 G BUS-CLK
64
SCLK
2/4 G BUS-CS-GN
63
SCS
VCODD
OVSYNC
VGAVS
VCLREQ
VGAHS
VGACREF
DFSYNC
VGACLK
146 164 141 125 145 144 193 142
11 12 14 15 19 23 25 31
I/O 2
I/O 3
I/O 5
I/O 6
I/O 8
I/O 12
I/O 14
I/O 16
IC3602
T.G
1/4 APAVS
24
I/O 13
2/4 ASYNCSEL
26
I/O 15
1/4 APAODD
9
I/O 0
4/4 SEL
36
I/O 21
4/4 AGC D/A R
35
I/O 20
4/4 R CH AGC SHP
41
I/O 24
4/4 CVD
43
I/O 26
4/4 CHD
42
I/O 25
2/4 SDO1
8
SDI/IN0
4/4 SDO2
18
SDO/IN1
2/4 SCLK
27
Y2/SCLK
2/4 MODE
30
IN2/MODE
2/4 ISPEN
7
ISPEN
I/O 10
21
I/O 11
22
YO
5
I/O 4
13
I/O 7
16
I/O 9
20
I/O 1
10
IC3605
BUFF
A1 A2 A3 A4 A5 A6 A7 A8
Y1 Y2 Y3 Y4 Y5 Y6 Y7 Y8
2 3 4 5 6 7 8 9
18 17 16 15 14 13 12 11
RMUXL 1/4
GMUXL 1/4
BMUXL 1/4
RMUXR 1/4
GMUXR 1/4
BMUXR 1/4
MUXCLKL 1/4
MUXCLKR 1/4
IC3606
BUFF
POVSL 1/4
POVSR 1/4
POHSL 1/4
POHSR 1/4
POCLKL 1/4
POCLKR 1/4
POFLDL 1/4
POFLDR 1/4
IC3613
D.FF
1D 1Q
1CK
2D 2Q
2CK
2 3 12 11 5 8
DHS 4/4
OSDH 2/4
4/4 AGCSHP
IC3614
D.FF
1D 1Q
1CK
2D 2Q
2CK
2 3 12 11 5 9
DVS 4/4
OSDV 2/4
IC3603
BUFF
9 7 8
IC3604
CLK CONTROL
15 FOUT
OSC IN
1
X3602
108 MHz
IC3608
BUFF
3 2
17 15 13 11 18
3DCLK2 4/4
MCLK2 4/4
DSD2CLK 2/4
IC3609
BUFF
2 3 6 8 7
15 16 14 12 13
OSD CLK 2/4
DACLK2-R 4/4
DACLK2-G 4/4
DACLK2-B 4/4

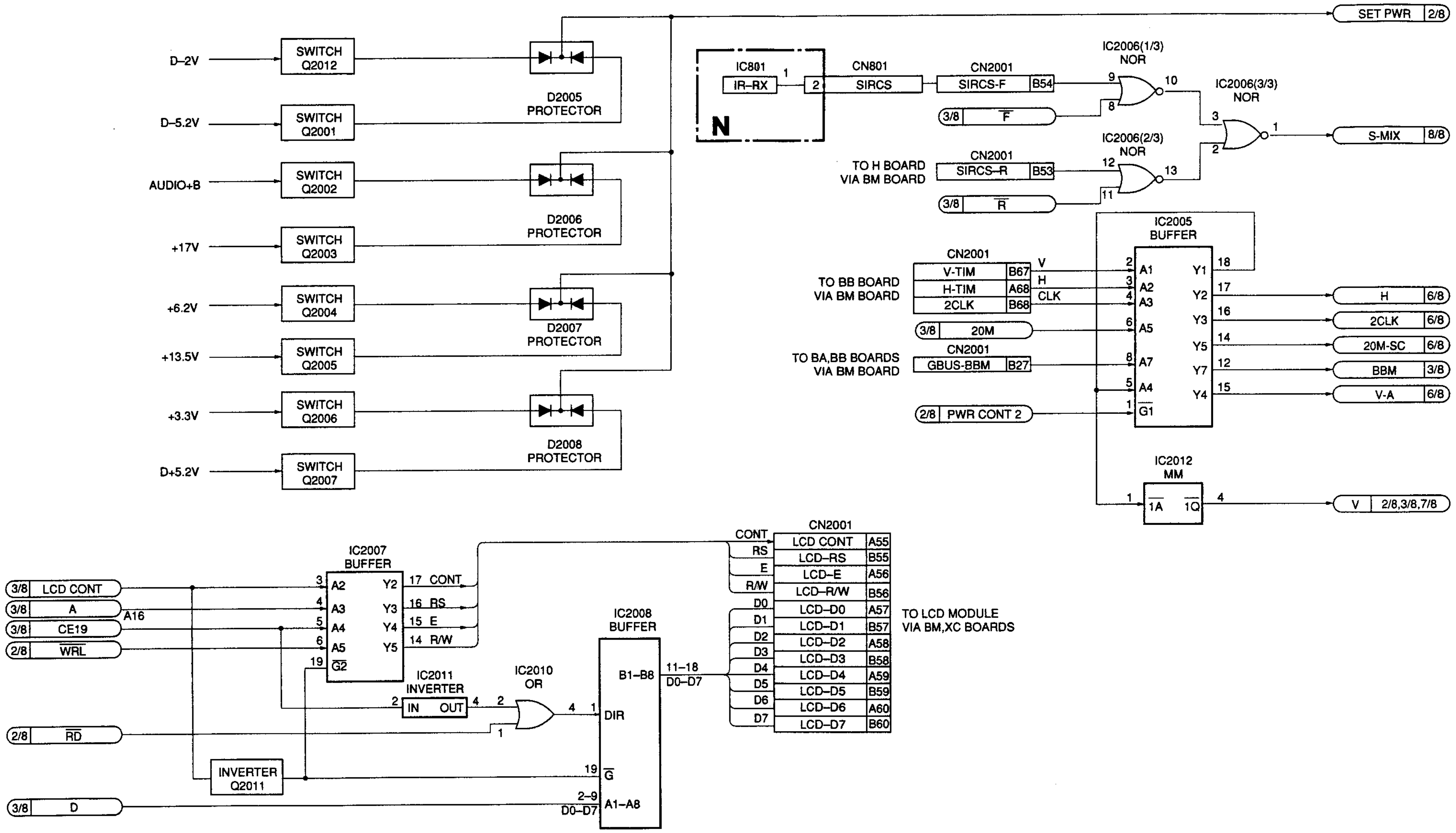
BB BLOCK (3/4)


IC3801, 3851, 3901
R CH, B CH, G CH
3D GAMMA
3/4 RRD,GRD,BRD
16-23
ODD SD7 I | ODD SD0 I
ODD SD0 O | ODD SD9 O
120-129
3/4 RLD,GLD,BLD
6-9, 11-14
EVEN SD7 I | EVEN SD0 I
EVEN SD0 O | EVEN SD9 O
132-141
159-163
PICASLD4 I | PICASLD0 I
166-172
BRTASLD6 I | BRTASLD0 I
2/4 GBUS CS 3DR
2/4 GBUS CS 3DB
2/4 GBUS CS 3DG
190 SDOENA I
191 SCS I
81-84 87-95
GA0 O | GA12 O
80 RD O
101 EXTBA D0 IO
IC3902
RESET
D3.3V
VDD OUT
1 3.3V-RST
188 RST I
55-59 62-64
GD0 I | GD7 I
2/4 GBUS-CLK 192 SCLK I
2/4 GBUS-MBB 193 SDI I
3/4 DHS 24 H SYN I
3/4 DVS 25 V SYNC I
3/4 3DCLK2 28 DOTCLK2 I
31 DOTCLK1P I
32 DOTCLKIN I
CE-I 65
GMUTE O 99
2/4 YML 34 YM EVEN I
2/4 YSL 35 YS EVEN I
2/4 YMR 42 YM ODD I
2/4 YSR 44 YS ODD I
MUTE I 199
2/4 RHL,BHL,GHL 37 EVEN OD3 I
39 EVEN OD2 I
2/4 RLL,BLL,GLL 40 EVEN OD1 I
41 EVEN OD0 I
2/4 RHR,BHR,GHR 46 ODD OD3 I
47 ODD OD2 I
2/4 RLR,BLR,GLR 48 ODD OD1 I
49 ODD OD0 I
54 G OFF
102 (IC3901 ONLY) EXTBA D1 IO
V SYNC O 143
H SYNC O 144
AGC SHP O 145
(IC3901 ONLY)
AGC SHP O 145
(IC3801 ONLY)
IC3802,3852,3906
R CH, B CH, G CH
DAC
24-28, 30-34
I/O C0 | I/O B9
1-5, 7-11
I/O A0 | I/O A9
I/O C0 | I/O C9
I/O D0 | I/O D9
51-55, 57-61
74-78, 80-84
YO 38
3/4 SDO2 39 TDI/SDI (IC3802)
2/4 SCLK 36 TCK/SCLK
2/4 MODE 86 TSM/MODE
2/4 ISPEN 35 BSCAN/ISPEN
2/4 SDO5 85 TDO/SDO (IC3906)
I/O B18 49
IC3803,3853,3907
R CH, B CH, G CH
DAC
1-7, 46-48
ID0 (LSB) | ID9(MSB)
30-39
QD0 (LSB) | QD9(MSB)
IOUTA 16
QOUTA 21
REFIO 23
42 QCLK
43 ICLK
IC3612
LEVEL SHIFT
2 18
3 17
3/4 AGC D/A R
3/4 SEL
3/4 DACLK2-R
3/4 DACLK2-G
3/4 DACLK2-B
3/4 MCLK2
IC3611
LEVEL SHIFT
7 BIN BOUT 2 BOUT 1
14 CIN COUT 18 COUT 19
DIN DOUT 17 DOUT 16
2/4 SDA
2/4 SCL
2/4 CRESET
2/4 FAN PROT
2/4 TEMP PROT
CN3602
21 R D/A Q
23 G D/A Q
25 B D/A Q
22 R D/A I
24 G D/A I
26 B D/A I
18 RED FB
19 GREEN FB
20 BLUE FB
13 SELECT
14 AGC D/A R
1 MCLK-P/2
2 MCLK-N/2
3 HSYNC-P
4 HSYNC-N
5 VSYNC-P
6 VAYNC-N
7 SDA
8 SCL
10 CRESET
11 FAN PROT
12 TEMP PROT
TO C BOARD
(IC3901 ONLY)
IC3906
GAMMA TABLE
5-8, 14-21,36
A0 | A12
24 OE
4 A13
10 RESET
DQ0 | DQ7
25-28, 32-35
Q0-Q7
IC3905
DECODER
GA 11 1 A0
GA 12 2 A1
Q0 15 R-CE
Q1 14 G-CE
Q2 13 B-CE
IC3904
OR
R-GMUTE 13
B-GMUTE 12
G-GMUTE 4,5
8 MUTE
CVD 3/4
CHD 3/4
AGCSHP 3/4
R CH AGC SHP 3/4

BB BLOCK (4/4)

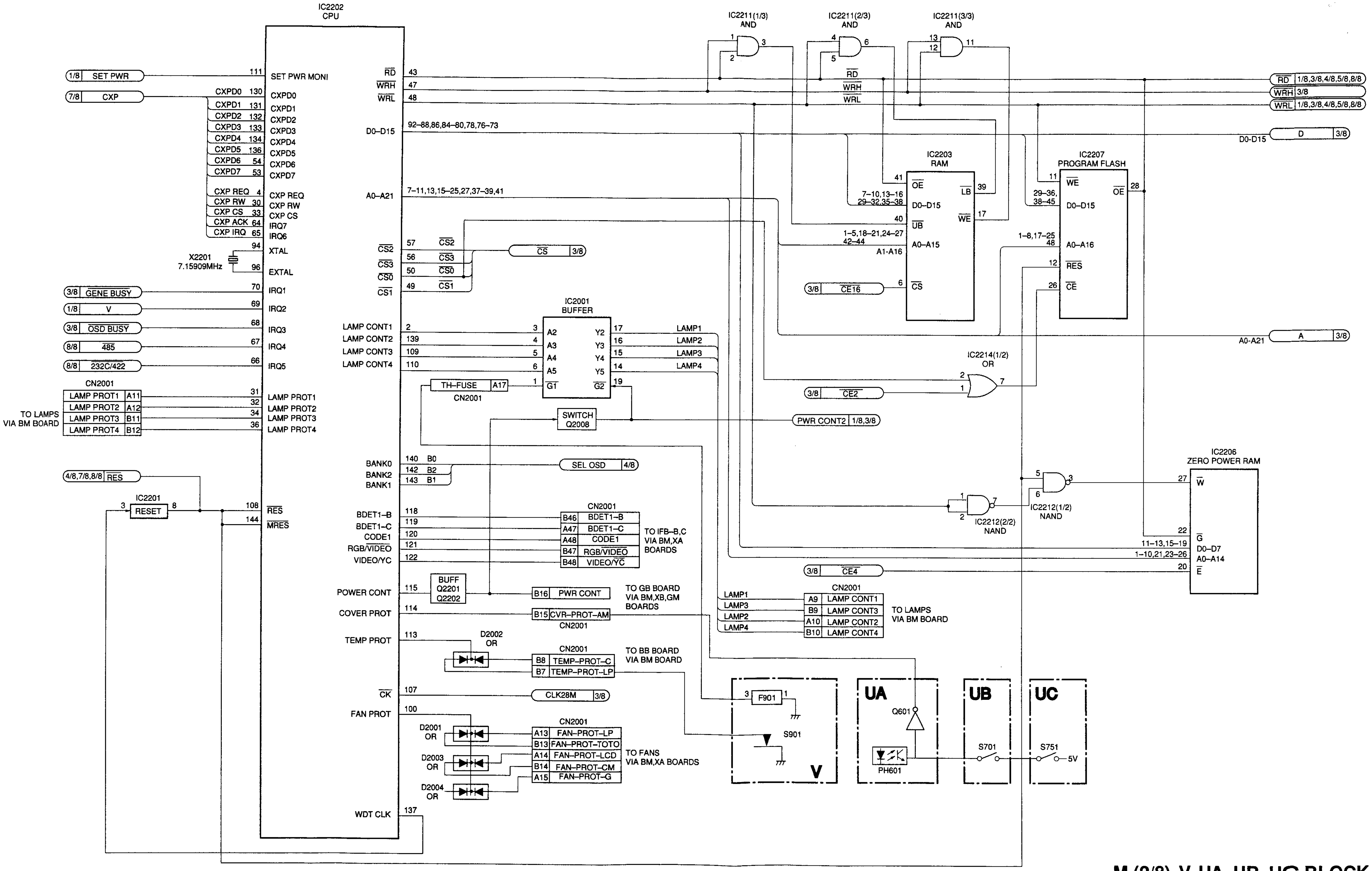

CN4001
TO QA BOARD VIA BM, XA BOARDS
AUDIO L IN A6
AUDIO L IN B6
AUDIO L IN C6
AUDIO R IN A8
AUDIO R IN B8
AUDIO R IN C8
SCL-1 C27
SDA-1 A27
TO M BOARD VIA BM BOARD
SP MUTE A28
AUDIO MUTE C28
13.5V A19
13.5V B19
13.5V C19
13.5V A20
13.5V B20
13.5V C20
TO M BOARD VIA BM BOARD
ZOOM+(M) A30
ZOOM–(M) C30
FOCUS+(M) A31
FOCUS–(M) C31
SHIFT+(M) A29
SHIFT–(M) C29
IC4002 AUDIO CONTROL
11 LIN L OUT 17
6 RIN R OUT 16
20 SCL
19 SDA
MUTING Q4008
MUTING Q4006
L
R
IC4006
5 LIN L OUT 8
4 INV.INL
1 RIN R OUT 10
2 INV.INR
+9V MUTING Q4005
D4010
SWITCH Q4007
INV Q4009
CN4003
SCL 2 SCL
SDA 1 SDA
IC4004 VAR OUT
3 IN1+ OUT1 1
5 IN2+ OUT2 7
AUDIO L OUT
AUDIO R OUT
MUTE Q4010
MUTE Q4011
MUTE SW Q4001,4002
D4001
+9V MUTING Q4003
12V REG IC4309 +12V
9V REG IC4003 +9V
CN4001
A10 AUDIO L OUT
B10 AUDIO L OUT
C10 AUDIO L OUT
A12 AUDIO R OUT
B12 AUDIO R OUT
C12 AUDIO R OUT
TO QB BOARD VIA BM, XA BOARDS
CN4002
27 SP L OUT+
25 SP R OUT+
28 SP L OUT–
26 SP R OUT–
TO C BOARD
3 SHIFT+
4 SHIFT–
5 ZOOM+
6 ZOOM–
7 FOCUS+
8 FOCUS–
IC4301 OR
1 1A 1Y 3 ZOOM+
1Y 2 1B
4 2A 2Y 6 ZOOM–
5 2B
12 4A 4Y 11
13 4B
IC4302 OR
1 1A 1Y 3
2Y 2 1B
4 2A 2Y 6 FOCUS+
5 2B
12 4A 4Y 11 FOCUS–
13 4B
IC4303 OR
1 1A 1Y 3 SHIFT+
3Y 2 1B
4 2A 2Y 6 SHIFT–
5 2B
12 4A 4Y 11
13 4B
IC4304 SC INVERTER
1 1A 1Y 2
3 2A 2Y 4
5 3A 3Y 6
9 4A 4Y 8
11 5A 5Y 10
13 6A 6Y 12
IC4305 AND
4 2A 1Y 3 1Y
2 1B
1 1A 2Y 6 2Y
5 2B
9 3A 3Y 8 3Y
10 3B
IC4306,4307,4308 MOTOR DRIVE
SHIFT+, ZOOM+, FOCUS+
4 IN1 O1 7 SHIFT+,ZOOM+,FOCUS+
SHIFT–, ZOOM–, FOCUS–
6 IN2 O2 3 SHIFT–,ZOOM–,FOCUS–

BC BLOCK

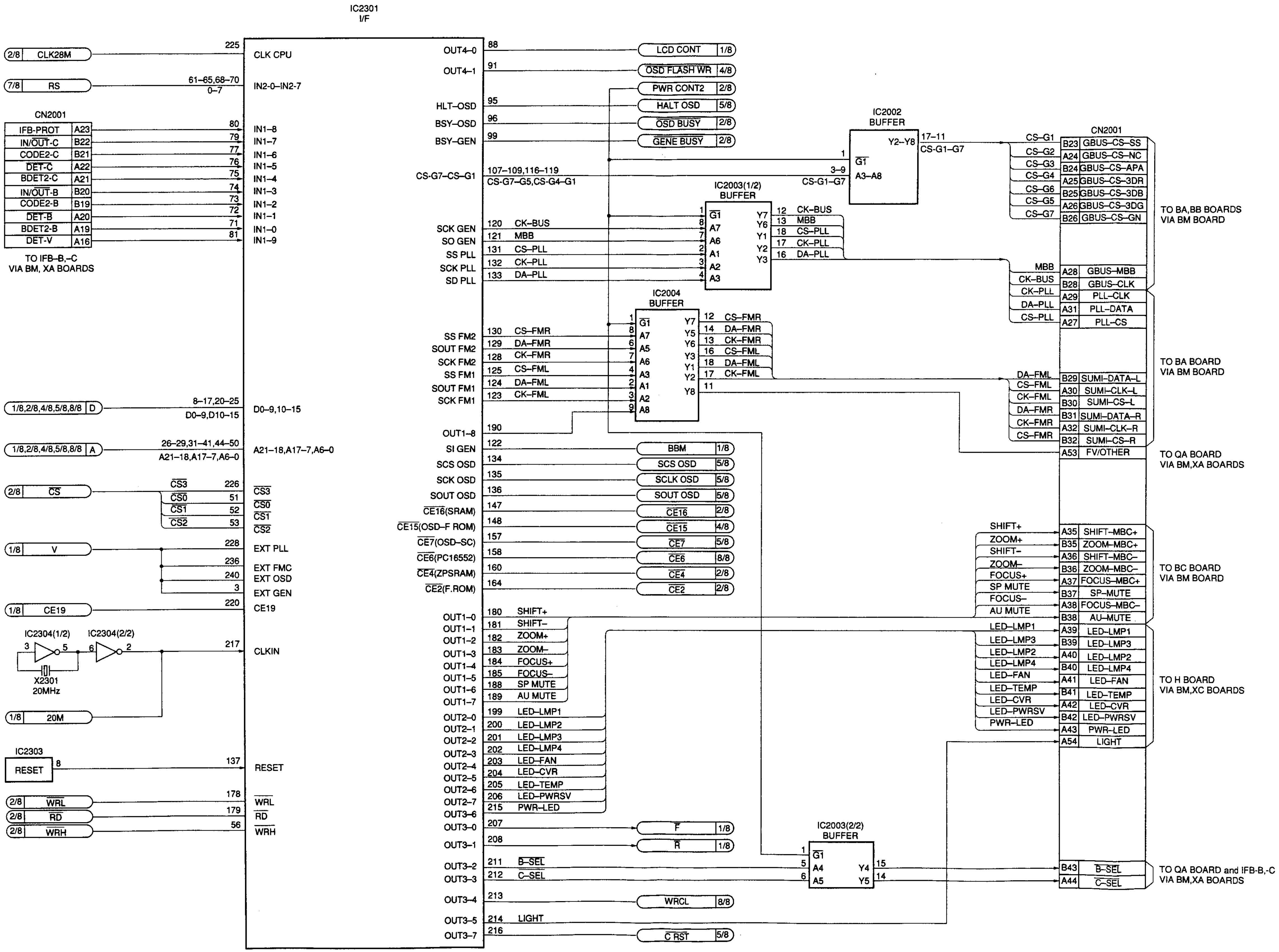

D–2V
SWITCH Q2012
D–5.2V
SWITCH Q2001
AUDIO+B
SWITCH Q2002
+17V
SWITCH Q2003
+6.2V
SWITCH Q2004
+13.5V
SWITCH Q2005
+3.3V
SWITCH Q2006
D+5.2V
SWITCH Q2007
D2005 PROTECTOR
D2006 PROTECTOR
D2007 PROTECTOR
D2008 PROTECTOR
SET PWR 2/8
IC801
IR–RX
N
CN801
SIRCS
CN2001
SIRCS-F B54
3/8 F
IC2006(1/3) NOR
IC2006(2/3) NOR
IC2006(3/3) NOR
S-MIX 8/8
TO H BOARD VIA BM BOARD
SIRCS–R B53
3/8 R
IC2005 BUFFER
TO BB BOARD VIA BM BOARD
V-TIM B67
H-TIM A68
2CLK B68
V
H
CLK
3/8 20M
TO BA,BB BOARDS VIA BM BOARD
GBUS-BBM B27
2/8 PWR CONT 2
A1 A2 A3 A5 A7 A4 G1
Y1 Y2 Y3 Y5 Y7 Y4
H 6/8
2CLK 6/8
20M-SC 6/8
BBM 3/8
V-A 6/8
IC2012 MM
1A 1Q
V 2/8,3/8,7/8
IC2007 BUFFER
3/8 LCD CONT
3/8 A
A16
3/8 CE19
2/8 WRL
A2 A3 A4 A5 G2
Y2 Y3 Y4 Y5
17 CONT
16 RS
15 E
14 R/W
IC2011 INVERTER
IN OUT
IC2010 OR
2/8 RD
INVERTER Q2011
3/8 D
IC2008 BUFFER
B1–B8
11–18 D0–D7
DIR
G
2–9 D0–D7
A1–A8
CONT RS E R/W D0 D1 D2 D3 D4 D5 D6 D7
CN2001
LCD CONT A55
LCD–RS B55
LCD–E A56
LCD–R/W B56
LCD–D0 A57
LCD–D1 B57
LCD–D2 A58
LCD–D3 B58
LCD–D4 A59
LCD–D5 B59
LCD–D6 A60
LCD–D7 B60
TO LCD MODULE VIA BM,XC BOARDS

M (1/8), N BLOCK

M (2/8), V, UA, UB, UC

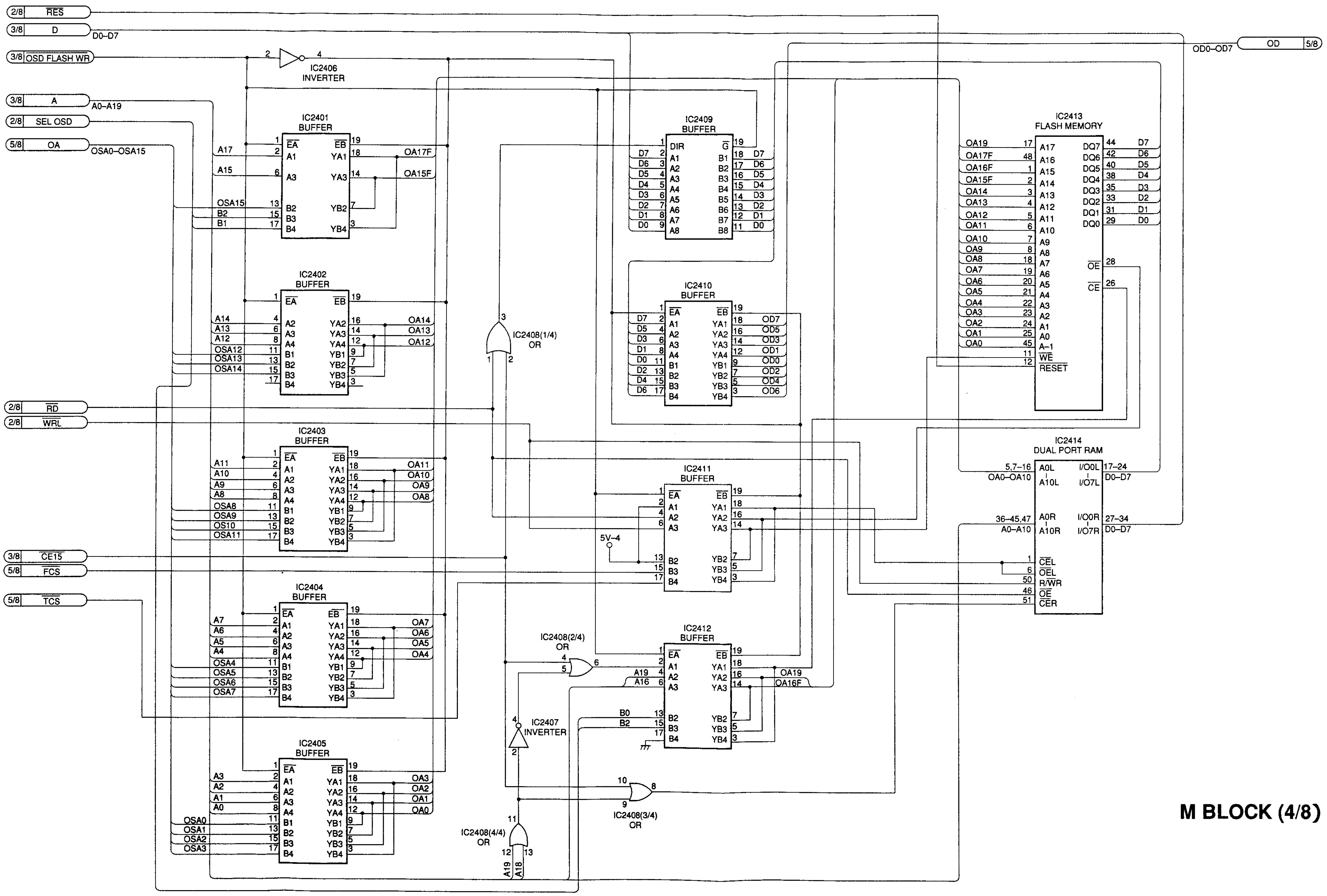

IC2202
CPU
1/8 SET PWR
7/8 CXP
SET PWR MONI
CXPD0
CXPD1
CXPD2
CXPD3
CXPD4
CXPD5
CXPD6
CXPD7
CXP REQ
CXP RW
CXP CS
CXP ACK
CXP IRQ
IRQ7
IRQ6
XTAL
EXTAL
X2201
7.15909MHz
3/8 GENE BUSY
1/8 V
3/8 OSD BUSY
8/8 485
8/8 232C/422
IRQ1
IRQ2
IRQ3
IRQ4
IRQ5
CN2001
LAMP PROT1 A11
LAMP PROT2 A12
LAMP PROT3 B11
LAMP PROT4 B12
TO LAMPS
VIA BM BOARD
4/8,7/8,8/8 RES
IC2201
RESET
RES
MRES
RD
WRH
WRL
D0–D15
92–88,86,84–80,78,76–73
A0–A21
7–11,13,15–25,27,37–39,41
CS2
CS3
CS0
CS1
CS 3/8
LAMP CONT1
LAMP CONT2
LAMP CONT3
LAMP CONT4
IC2001
BUFFER
TH–FUSE A17
CN2001
SWITCH
Q2008
LAMP1
LAMP2
LAMP3
LAMP4
BANK0
BANK2
BANK1
B0
B2
B1
SEL OSD 4/8
BDET1–B
BDET1–C
CODE1
RGB/VIDEO
VIDEO/YC
CN2001
B46 BDET1–B
A47 BDET1–C
A48 CODE1
B47 RGB/VIDEO
B48 VIDEO/YC
TO IFB–B,C
VIA BM,XA
BOARDS
POWER CONT
BUFF
Q2201
Q2202
B16 PWR CONT
TO GB BOARD
VIA BM,XB,GM
BOARDS
COVER PROT
B15 CVR–PROT–AM
CN2001
TEMP PROT
D2002
OR
CN2001
B8 TEMP–PROT–C
B7 TEMP–PROT–LP
TO BB BOARD
VIA BM BOARD
CK
CLK28M 3/8
FAN PROT
D2001
OR
D2003
OR
D2004
OR
CN2001
A13 FAN–PROT–LP
B13 FAN–PROT–TOTO
A14 FAN–PROT–LCD
B14 FAN–PROT–CM
A15 FAN–PROT–G
TO FANS
VIA BM,XA BOARDS
WDT CLK
IC2211(1/3)
AND
IC2211(2/3)
AND
IC2211(3/3)
AND
RD 1/8,3/8,4/8,5/8,8/8
WRH 3/8
WRL 1/8,3/8,4/8,5/8,8/8
D0-D15
D 3/8
IC2203
RAM
OE
LB
D0–D15
UB
WE
A0–A15
A1-A16
CS
7–10,13–16
29–32,35–38
1–5,18–21,24–27
42–44
3/8 CE16
IC2207
PROGRAM FLASH
WE
OE
D0–D15
A0–A16
RES
CE
29–36,
38–45
1–8,17–25
48
A0-A21
A 3/8
IC2214(1/2)
OR
3/8 CE2
PWR CONT2 1/8,3/8
IC2206
ZERO POWER RAM
W
G
D0–D7
A0–A14
E
11–13,15–19
1–10,21,23–26
IC2212(1/2)
NAND
IC2212(2/2)
NAND
3/8 CE4
CN2001
LAMP1
LAMP3
LAMP2
LAMP4
A9 LAMP CONT1
B9 LAMP CONT3
A10 LAMP CONT2
B10 LAMP CONT4
TO LAMPS
VIA BM BOARD
F901
S901
V
UA
Q601
PH601
UB
S701
UC
S751
5V

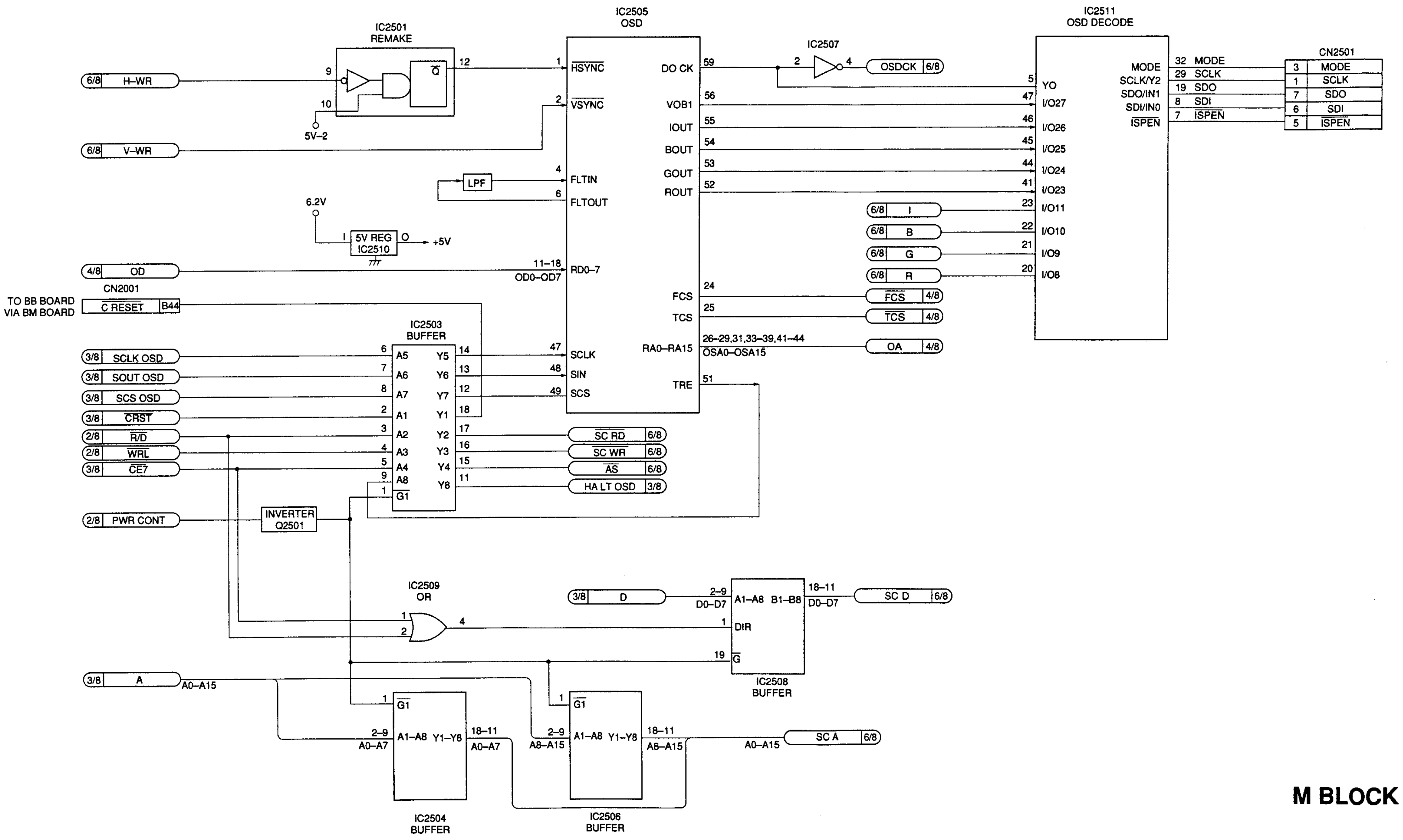
M (2/8), V, UA, UB, UC BLOCK


IC2301
I/F
CLK CPU
IN2-0–IN2-7
IN1-8
IN1-7
IN1-6
IN1-5
IN1-4
IN1-3
IN1-2
IN1-1
IN1-0
IN1-9
D0-9,10-15
A21-18,A17-7,A6-0
CS3
CS0
CS1
CS2
EXT PLL
EXT FMC
EXT OSD
EXT GEN
CE19
CLKIN
RESET
WRL
RD
WRH
OUT4-0
OUT4-1
HLT-OSD
BSY-OSD
BSY-GEN
CS-G7–CS-G1
SCK GEN
SO GEN
SS PLL
SCK PLL
SD PLL
SS FM2
SOUT FM2
SCK FM2
SS FM1
SOUT FM1
SCK FM1
OUT1-8
SI GEN
SCS OSD
SCK OSD
SOUT OSD
CE16(SRAM)
CE15(OSD-F ROM)
CE7(OSD-SC)
CE6(PC16552)
CE4(ZPSRAM)
CE2(F.ROM)
OUT1-0
OUT1-1
OUT1-2
OUT1-3
OUT1-4
OUT1-5
OUT1-6
OUT1-7
OUT2-0
OUT2-1
OUT2-2
OUT2-3
OUT2-4
OUT2-5
OUT2-6
OUT2-7
OUT3-6
OUT3-0
OUT3-1
OUT3-2
OUT3-3
OUT3-4
OUT3-5
OUT3-7
2/8 CLK28M
7/8 RS
CN2001
IFB-PROT A23
IN/OUT-C B22
CODE2-C B21
DET-C A22
BDET2-C A21
IN/OUT-B B20
CODE2-B B19
DET-B A20
BDET2-B A19
DET-V A16
TO IFB-B,-C
VIA BM, XA BOARDS
1/8,2/8,4/8,5/8,8/8 D
1/8,2/8,4/8,5/8,8/8 A
2/8 CS
1/8 V
1/8 CE19
IC2304(1/2)
IC2304(2/2)
X2301
20MHz
1/8 20M
IC2303
RESET
2/8 WRL
2/8 RD
2/8 WRH
LCD CONT 1/8
OSD FLASH WR 4/8
PWR CONT2 2/8
HALT OSD 5/8
OSD BUSY 2/8
GENE BUSY 2/8
IC2002
BUFFER
IC2003(1/2)
BUFFER
IC2004
BUFFER
CK-BUS
MBB
CS-PLL
CK-PLL
DA-PLL
CS-FMR
DA-FMR
CK-FMR
CS-FML
DA-FML
CK-FML
BBM 1/8
SCS OSD 5/8
SCLK OSD 5/8
SOUT OSD 5/8
CE16 2/8
CE15 4/8
CE7 5/8
CE6 8/8
CE4 2/8
CE2 2/8
SHIFT+
SHIFT–
ZOOM+
ZOOM–
FOCUS+
FOCUS–
SP MUTE
AU MUTE
LED-LMP1
LED-LMP2
LED-LMP3
LED-LMP4
LED-FAN
LED-CVR
LED-TEMP
LED-PWRSV
PWR-LED
F 1/8
R 1/8
B-SEL
C-SEL
WRCL 8/8
LIGHT
C RST 5/8
IC2003(2/2)
BUFFER
CN2001
B23 GBUS-CS-SS
A24 GBUS-CS-NC
B24 GBUS-CS-APA
A25 GBUS-CS-3DR
B25 GBUS-CS-3DB
A26 GBUS-CS-3DG
B26 GBUS-CS-GN
TO BA,BB BOARDS
VIA BM BOARD
A28 GBUS-MBB
B28 GBUS-CLK
A29 PLL-CLK
A31 PLL-DATA
A27 PLL-CS
B29 SUMI-DATA-L
A30 SUMI-CLK-L
B30 SUMI-CS-L
B31 SUMI-DATA-R
A32 SUMI-CLK-R
B32 SUMI-CS-R
TO BA BOARD
VIA BM BOARD
A53 FV/OTHER
TO QA BOARD
VIA BM,XA BOARDS
A35 SHIFT-MBC+
B35 ZOOM-MBC+
A36 SHIFT-MBC–
B36 ZOOM-MBC–
A37 FOCUS-MBC+
B37 SP-MUTE
A38 FOCUS-MBC–
B38 AU-MUTE
TO BC BOARD
VIA BM BOARD
A39 LED-LMP1
B39 LED-LMP3
A40 LED-LMP2
B40 LED-LMP4
A41 LED-FAN
B41 LED-TEMP
A42 LED-CVR
B42 LED-PWRSV
A43 PWR-LED
A54 LIGHT
TO H BOARD
VIA BM,XC BOARDS
B43 B-SEL
A44 C-SEL
TO QA BOARD and IFB-B,-C
VIA BM,XA BOARDS

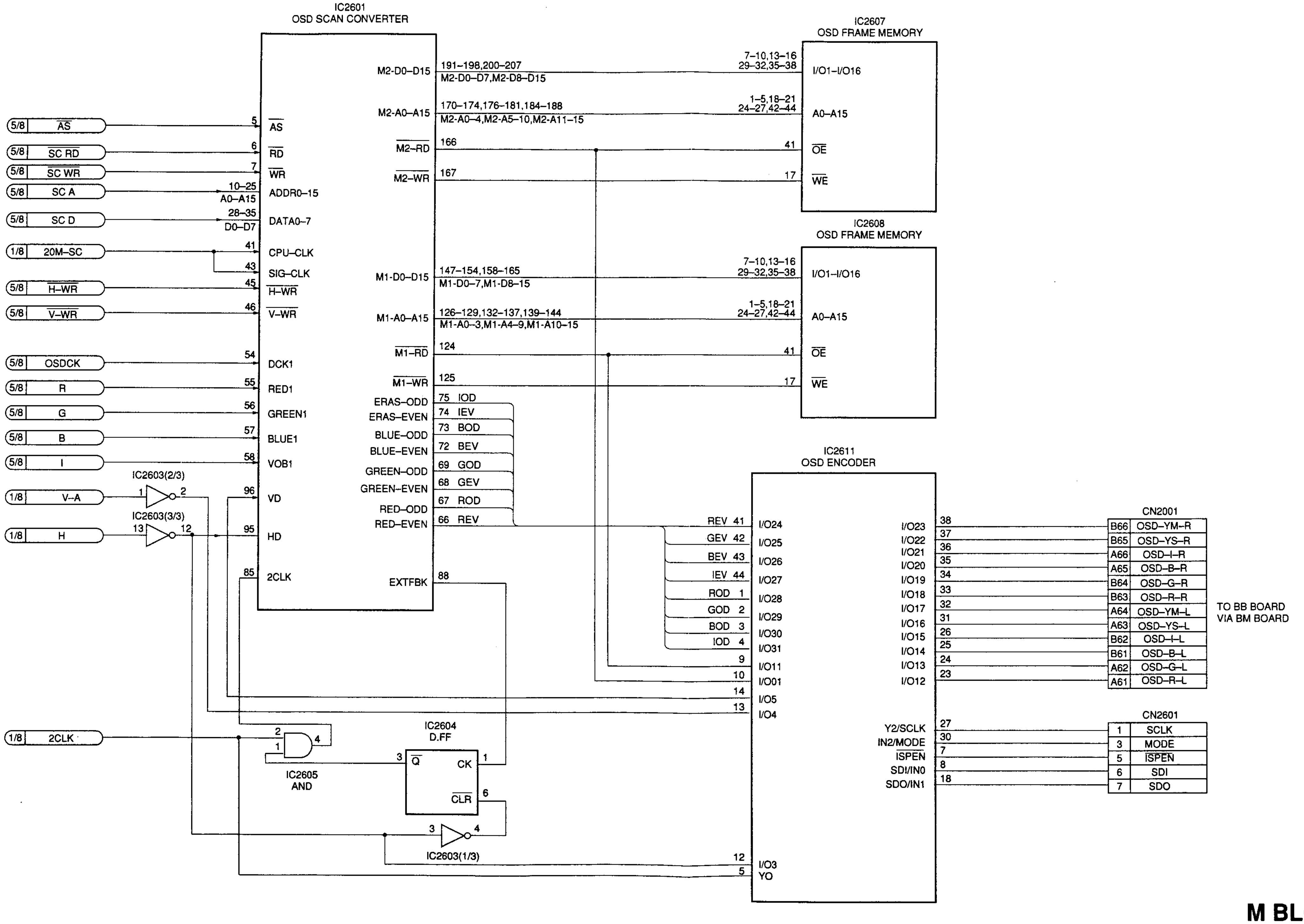
M BLOCK (3/8)

M BLOCK (4/8)

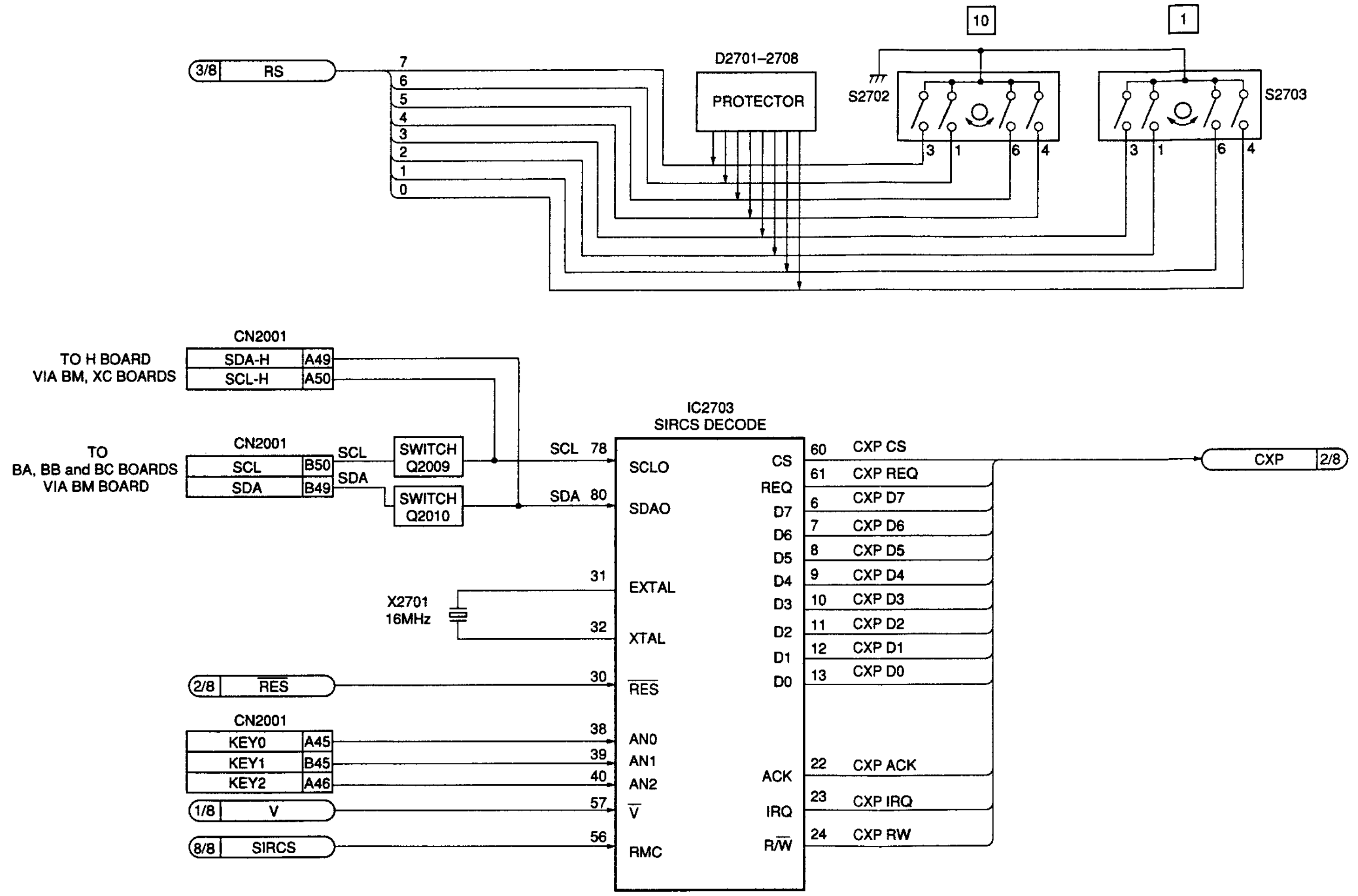

2/8 RES
3/8 D
D0–D7
3/8 OSD FLASH WR
3/8 A
A0–A19
2/8 SEL OSD
5/8 OA
OSA0–OSA15
2/8 RD
2/8 WRL
3/8 CE15
5/8 FCS
5/8 TCS
IC2406 INVERTER
IC2401 BUFFER
A17
A15
OSA15
B2
B1
EA
A1
A3
B2
B3
B4
EB
YA1
YA3
YB2
YB4
OA17F
OA15F
IC2402 BUFFER
A14
A13
A12
OSA12
OSA13
OSA14
A2
A3
A4
B1
B2
B3
B4
YA2
YA3
YA4
YB1
YB2
YB3
YB4
OA14
OA13
OA12
IC2403 BUFFER
A11
A10
A9
A8
OSA8
OSA9
OSA10
OSA11
OA11
OA10
OA9
OA8
IC2404 BUFFER
A7
A6
A5
A4
OSA4
OSA5
OSA6
OSA7
OA7
OA6
OA5
OA4
IC2405 BUFFER
A3
A2
A1
A0
OSA0
OSA1
OSA2
OSA3
OA3
OA2
OA1
OA0
IC2408(1/4) OR
IC2408(2/4) OR
IC2408(3/4) OR
IC2408(4/4) OR
IC2407 INVERTER
A19
A18
IC2409 BUFFER
DIR
G
A1
A2
A3
A4
A5
A6
A7
A8
B1
B2
B3
B4
B5
B6
B7
B8
D7
D6
D5
D4
D3
D2
D1
D0
IC2410 BUFFER
OD7
OD5
OD3
OD1
OD0
OD2
OD4
OD6
IC2411 BUFFER
5V–4
IC2412 BUFFER
A19
A16
OA19
OA16F
B0
B2
IC2413 FLASH MEMORY
OA19
OA17F
OA16F
OA15F
OA14
OA13
OA12
OA11
OA10
OA9
OA8
OA7
OA6
OA5
OA4
OA3
OA2
OA1
OA0
A17
A16
A15
A14
A13
A12
A11
A10
A9
A8
A7
A6
A5
A4
A3
A2
A1
A0
A–1
WE
RESET
DQ7
DQ6
DQ5
DQ4
DQ3
DQ2
DQ1
DQ0
OE
CE
IC2414 DUAL PORT RAM
5,7–16
OA0–OA10
A0L
A10L
I/O0L
I/O7L
17–24
D0–D7
36–45,47
A0–A10
A0R
A10R
I/O0R
I/O7R
27–34
D0–D7
CEL
OEL
R/WR
OE
CER
OD0–OD7
OD 5/8
1
2
3
4
5
A
B
C
D
E
F
G
H


IC2501
REMAKE
IC2505
OSD
IC2507
IC2511
OSD DECODE
CN2501
6/8 H-WR
6/8 V-WR
5V-2
HSYNC
VSYNC
DO CK
VOB1
IOUT
BOUT
GOUT
ROUT
FLTIN
FLTOUT
LPF
6.2V
5V REG
IC2510
+5V
4/8 OD
OD0–OD7
RD0–7
CN2001
TO BB BOARD
VIA BM BOARD
C RESET
B44
FCS
TCS
RA0–RA15
26–29,31,33–39,41–44
OSA0–OSA15
TRE
OSDCK 6/8
YO
I/O27
I/O26
I/O25
I/O24
I/O23
I/O11
I/O10
I/O9
I/O8
6/8 I
6/8 B
6/8 G
6/8 R
FCS 4/8
TCS 4/8
OA 4/8
MODE
SCLK/Y2
SDO/IN1
SDI/IN0
ISPEN
32 MODE
29 SCLK
19 SDO
8 SDI
7 ISPEN
3 MODE
1 SCLK
7 SDO
6 SDI
5 ISPEN
IC2503
BUFFER
3/8 SCLK OSD
3/8 SOUT OSD
3/8 SCS OSD
3/8 CRST
2/8 R/D
2/8 WRL
3/8 CE7
SCLK
SIN
SCS
SC RD 6/8
SC WR 6/8
AS 6/8
HA LT OSD 3/8
2/8 PWR CONT
INVERTER
Q2501
IC2509
OR
3/8 D
D0–D7
A1–A8
B1–B8
DIR
G
SC D 6/8
IC2508
BUFFER
3/8 A
A0–A15
A0–A7
A8–A15
A1–A8
Y1–Y8
SC A 6/8
IC2504
BUFFER
IC2506
BUFFER

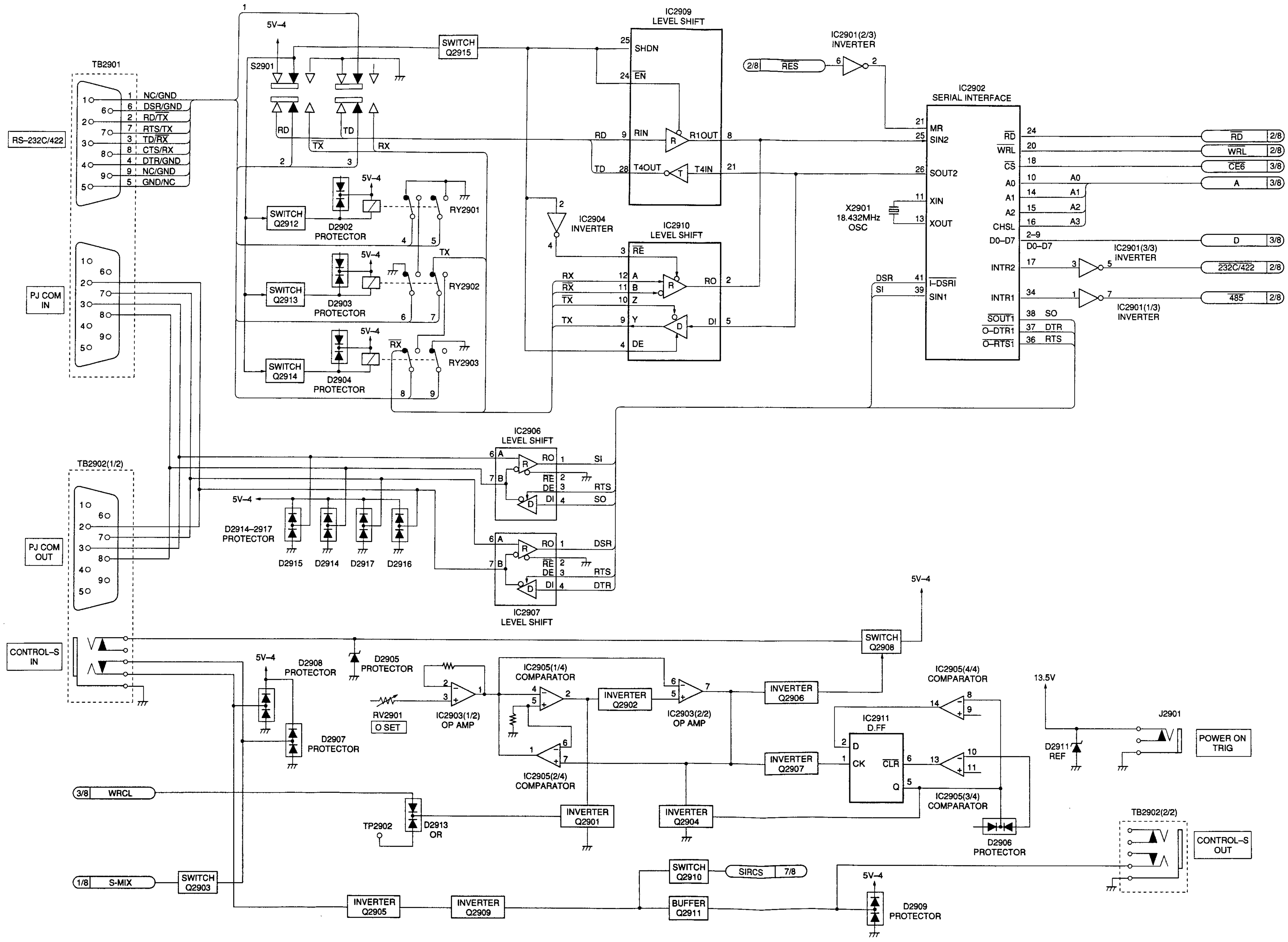
M BLOCK (5/8)


IC2601
OSD SCAN CONVERTER
IC2607
OSD FRAME MEMORY
IC2608
OSD FRAME MEMORY
IC2611
OSD ENCODER
IC2603(2/3)
IC2603(3/3)
IC2603(1/3)
IC2604
D.FF
IC2605
AND
CN2001
CN2601
5/8 AS
5/8 SC RD
5/8 SC WR
5/8 SC A
5/8 SC D
1/8 20M-SC
5/8 H-WR
5/8 V-WR
5/8 OSDCK
5/8 R
5/8 G
5/8 B
5/8 I
1/8 V-A
1/8 H
1/8 2CLK
AS
RD
WR
ADDR0-15
DATA0-7
CPU-CLK
SIG-CLK
H-WR
V-WR
DCK1
RED1
GREEN1
BLUE1
VOB1
VD
HD
2CLK
10-25 A0-A15
28-35 D0-D7
M2-D0-D15
M2-A0-A15
M2-RD
M2-WR
M1-D0-D15
M1-A0-A15
M1-RD
M1-WR
ERAS-ODD
ERAS-EVEN
BLUE-ODD
BLUE-EVEN
GREEN-ODD
GREEN-EVEN
RED-ODD
RED-EVEN
EXTFBK
191-198,200-207
M2-D0-D7,M2-D8-D15
170-174,176-181,184-188
M2-A0-4,M2-A5-10,M2-A11-15
147-154,158-165
M1-D0-7,M1-D8-15
126-129,132-137,139-144
M1-A0-3,M1-A4-9,M1-A10-15
7-10,13-16
29-32,35-38
1-5,18-21
24-27,42-44
I/O1-I/O16
A0-A15
OE
WE
75 IOD
74 IEV
73 BOD
72 BEV
69 GOD
68 GEV
67 ROD
66 REV
REV 41
GEV 42
BEV 43
IEV 44
ROD 1
GOD 2
BOD 3
IOD 4
I/O24
I/O25
I/O26
I/O27
I/O28
I/O29
I/O30
I/O31
I/O11
I/O01
I/O5
I/O4
I/O3
YO
I/O23
I/O22
I/O21
I/O20
I/O19
I/O18
I/O17
I/O16
I/O15
I/O14
I/O13
I/O12
Y2/SCLK
IN2/MODE
ISPEN
SDI/IN0
SDO/IN1
Q
CK
CLR
B66 OSD-YM-R
B65 OSD-YS-R
A66 OSD-I-R
A65 OSD-B-R
B64 OSD-G-R
B63 OSD-R-R
A64 OSD-YM-L
A63 OSD-YS-L
B62 OSD-I-L
B61 OSD-B-L
A62 OSD-G-L
A61 OSD-R-L
TO BB BOARD
VIA BM BOARD
1 SCLK
3 MODE
5 ISPEN
6 SDI
7 SDO

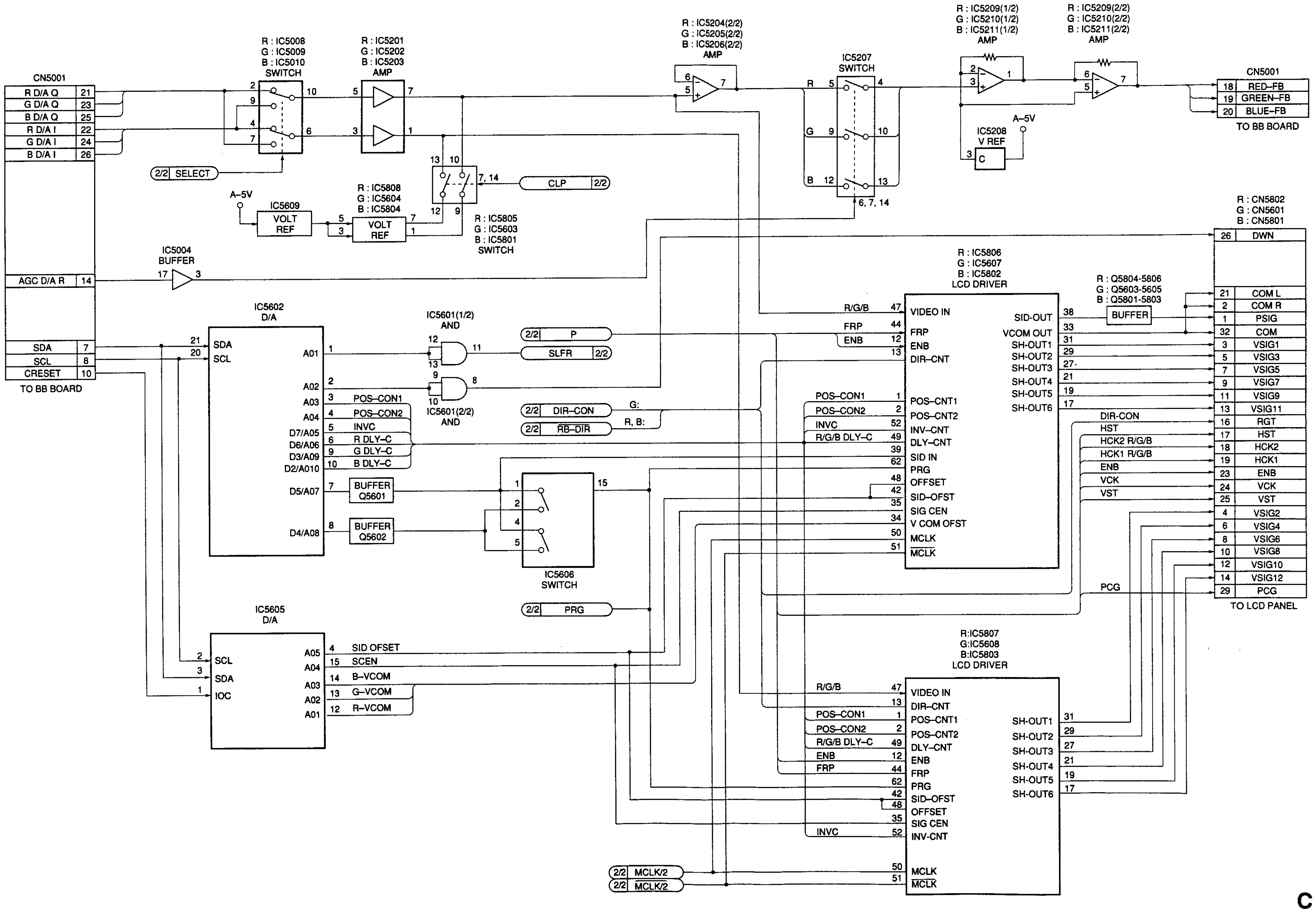
M BLOCK (6/8)


3/8
RS
7
6
5
4
3
2
1
0
D2701–2708
PROTECTOR
10
1
S2702
S2703
3
1
6
4
CN2001
TO H BOARD
VIA BM, XC BOARDS
SDA-H
A49
SCL-H
A50
TO
BA, BB and BC BOARDS
VIA BM BOARD
SCL
B50
SDA
B49
SWITCH
Q2009
SWITCH
Q2010
IC2703
SIRCS DECODE
SCL 78
SDA 80
SCLO
SDAO
31
EXTAL
32
XTAL
X2701
16MHz
2/8
RES
30
CN2001
KEY0
A45
KEY1
B45
KEY2
A46
38
AN0
39
AN1
40
AN2
1/8
V
57
8/8
SIRCS
56
RMC
CS
REQ
D7
D6
D5
D4
D3
D2
D1
D0
60 CXP CS
61 CXP REQ
6 CXP D7
7 CXP D6
8 CXP D5
9 CXP D4
10 CXP D3
11 CXP D2
12 CXP D1
13 CXP D0
ACK
IRQ
R/W
22 CXP ACK
23 CXP IRQ
24 CXP RW
CXP
2/8

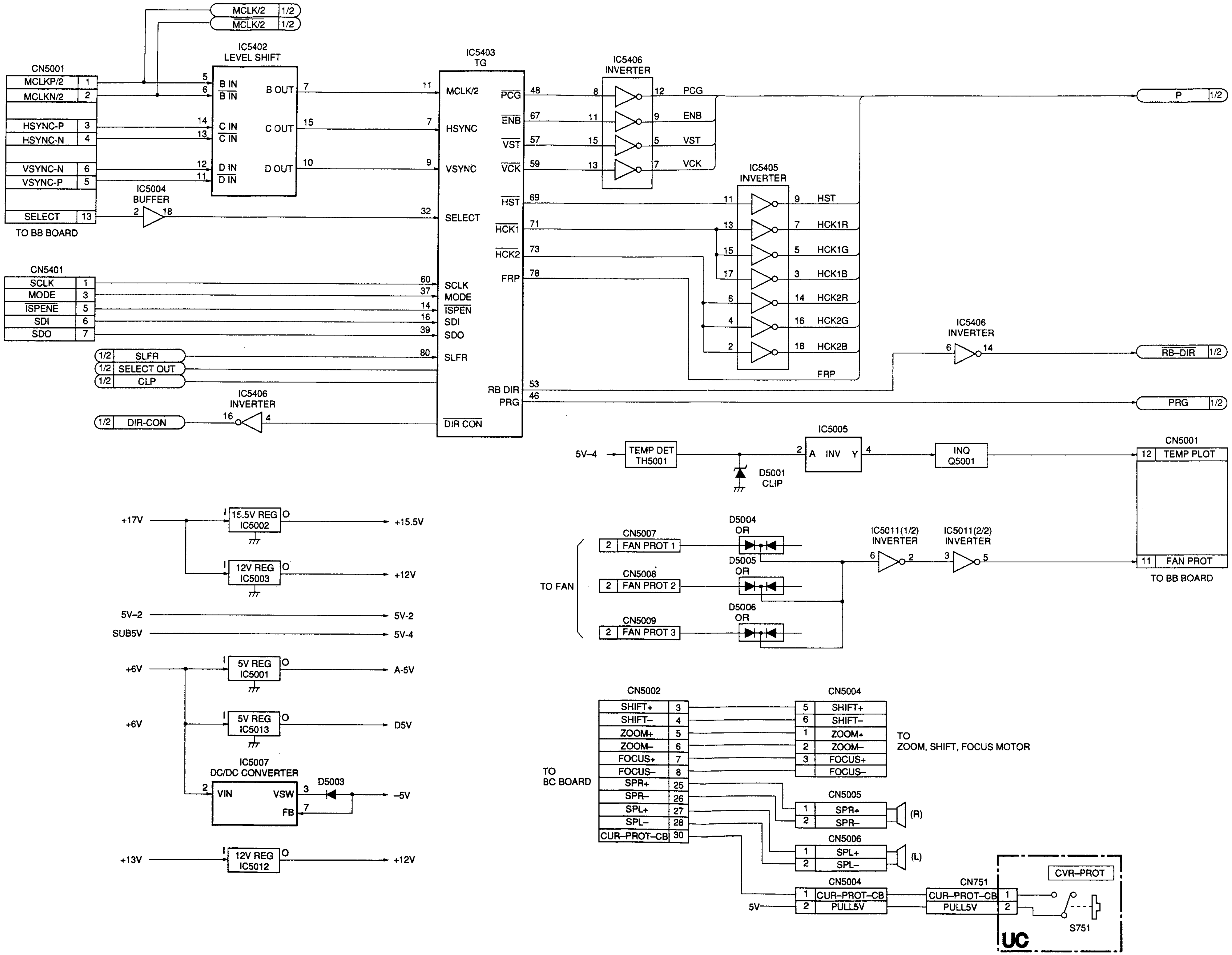
M BLOCK (7/8)


1
2
3
4
5
A
B
C
D
E
F
G
H
TB2901
RS-232C/422
NC/GND
DSR/GND
RD/TX
RTS/TX
TD/RX
CTS/RX
DTR/GND
NC/GND
GND/NC
PJ COM IN
PJ COM OUT
TB2902(1/2)
CONTROL-S IN
5V-4
S2901
RD
TD
TX
RX
SWITCH Q2915
SWITCH Q2912
SWITCH Q2913
SWITCH Q2914
D2902 PROTECTOR
D2903 PROTECTOR
D2904 PROTECTOR
RY2901
RY2902
RY2903
IC2909 LEVEL SHIFT
SHDN
EN
RIN
R1OUT
T4OUT
T4IN
IC2904 INVERTER
IC2910 LEVEL SHIFT
RE
A
B
Z
Y
DE
RO
DI
IC2901(2/3) INVERTER
RES
2/8
IC2902 SERIAL INTERFACE
MR
SIN2
SOUT2
XIN
XOUT
I-DSRI
SIN1
X2901 18.432MHz OSC
RD
WRL
CS
A0
A1
A2
CHSL
D0-D7
INTR2
INTR1
SOUT1
O-DTR1
O-RTS1
CE6
3/8
D
IC2901(3/3) INVERTER
232C/422
485
IC2901(1/3) INVERTER
SO
DTR
RTS
DSR
SI
IC2906 LEVEL SHIFT
IC2907 LEVEL SHIFT
D2914-2917 PROTECTOR
D2915
D2914
D2917
D2916
SWITCH Q2908
D2905 PROTECTOR
D2908 PROTECTOR
D2907 PROTECTOR
RV2901
O SET
IC2903(1/2) OP AMP
IC2905(1/4) COMPARATOR
INVERTER Q2902
IC2903(2/2) OP AMP
IC2905(2/4) COMPARATOR
INVERTER Q2906
INVERTER Q2907
IC2905(4/4) COMPARATOR
IC2911 D.FF
CK
CLR
Q
IC2905(3/4) COMPARATOR
13.5V
J2901
POWER ON TRIG
D2911 REF
WRCL
TP2902
D2913 OR
INVERTER Q2901
INVERTER Q2904
D2906 PROTECTOR
TB2902(2/2)
CONTROL-S OUT
S-MIX
1/8
SWITCH Q2903
SWITCH Q2910
SIRCS
7/8
BUFFER Q2911
INVERTER Q2905
INVERTER Q2909
D2909 PROTECTOR

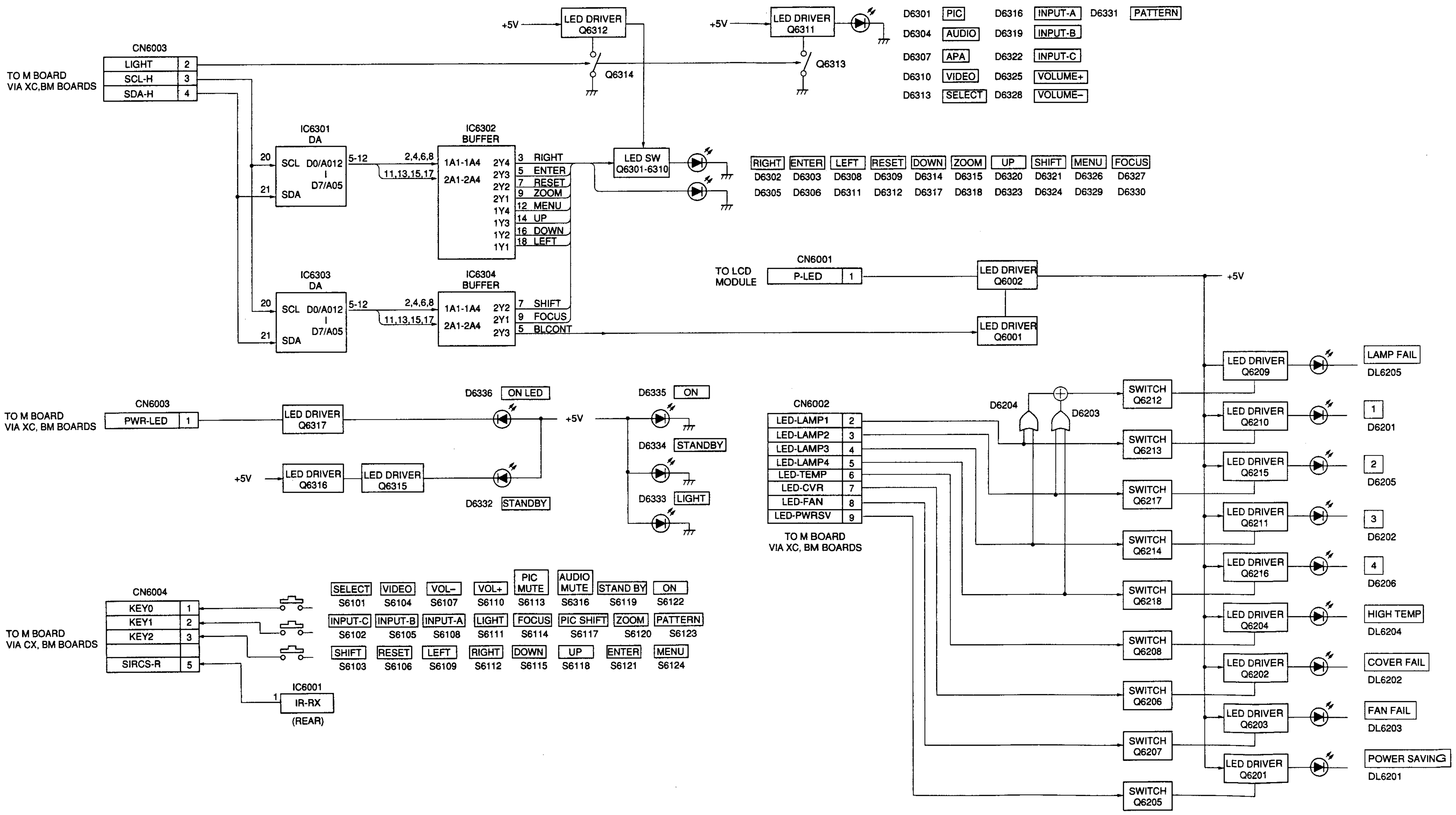
M BLOCK (8/8)


CN5001
R D/A Q 21
G D/A Q 23
B D/A Q 25
R D/A I 22
G D/A I 24
B D/A I 26
AGC D/A R 14
SDA 7
SCL 8
CRESET 10
TO BB BOARD
R : IC5008
G : IC5009
B : IC5010
SWITCH
R : IC5201
G : IC5202
B : IC5203
AMP
2/2 SELECT
A–5V
IC5609
VOLT REF
R : IC5808
G : IC5604
B : IC5804
VOLT REF
R : IC5805
G : IC5603
B : IC5801
SWITCH
CLP 2/2
IC5004
BUFFER
R : IC5204(2/2)
G : IC5205(2/2)
B : IC5206(2/2)
AMP
IC5207
SWITCH
6, 7, 14
R : IC5209(1/2)
G : IC5210(1/2)
B : IC5211(1/2)
AMP
R : IC5209(2/2)
G : IC5210(2/2)
B : IC5211(2/2)
AMP
A–5V
IC5208
V REF
CN5001
18 RED–FB
19 GREEN–FB
20 BLUE–FB
TO BB BOARD
R : CN5802
G : CN5601
B : CN5801
26 DWN
21 COM L
2 COM R
1 PSIG
32 COM
3 VSIG1
5 VSIG3
7 VSIG5
9 VSIG7
11 VSIG9
13 VSIG11
16 RGT
17 HST
18 HCK2
19 HCK1
23 ENB
24 VCK
25 VST
4 VSIG2
6 VSIG4
8 VSIG6
10 VSIG8
12 VSIG10
14 VSIG12
29 PCG
TO LCD PANEL
R : Q5804-5806
G : Q5603-5605
B : Q5801-5803
BUFFER
IC5602
D/A
SDA
SCL
A01
A02
A03
A04
D7/A05
D6/A06
D3/A09
D2/A010
D5/A07
D4/A08
POS–CON1
POS–CON2
INVC
R DLY–C
G DLY–C
B DLY–C
BUFFER Q5601
BUFFER Q5602
IC5601(1/2) AND
IC5601(2/2) AND
2/2 P
SLFR 2/2
2/2 DIR–CON
2/2 RB–DIR
G:
R, B:
IC5606
SWITCH
2/2 PRG
R : IC5806
G : IC5607
B : IC5802
LCD DRIVER
R/G/B
FRP
ENB
VIDEO IN
FRP
ENB
DIR–CNT
POS–CNT1
POS–CNT2
INV–CNT
DLY–CNT
SID IN
PRG
OFFSET
SID–OFST
SIG CEN
V COM OFST
MCLK
MCLK
SID–OUT
VCOM OUT
SH–OUT1
SH–OUT2
SH–OUT3
SH–OUT4
SH–OUT5
SH–OUT6
DIR–CON
HST
HCK2 R/G/B
HCK1 R/G/B
ENB
VCK
VST
PCG
IC5605
D/A
SCL
SDA
IOC
A05
A04
A03
A02
A01
SID OFSET
SCEN
B–VCOM
G–VCOM
R–VCOM
R:IC5807
G:IC5608
B:IC5803
LCD DRIVER
R/G/B
POS–CON1
POS–CON2
R/G/B DLY–C
ENB
FRP
INVC
VIDEO IN
DIR–CNT
POS–CNT1
POS–CNT2
DLY–CNT
ENB
FRP
PRG
SID–OFST
OFFSET
SIG CEN
INV–CNT
MCLK
MCLK
SH–OUT1
SH–OUT2
SH–OUT3
SH–OUT4
SH–OUT5
SH–OUT6
2/2 MCLK/2
2/2 MCLK/2

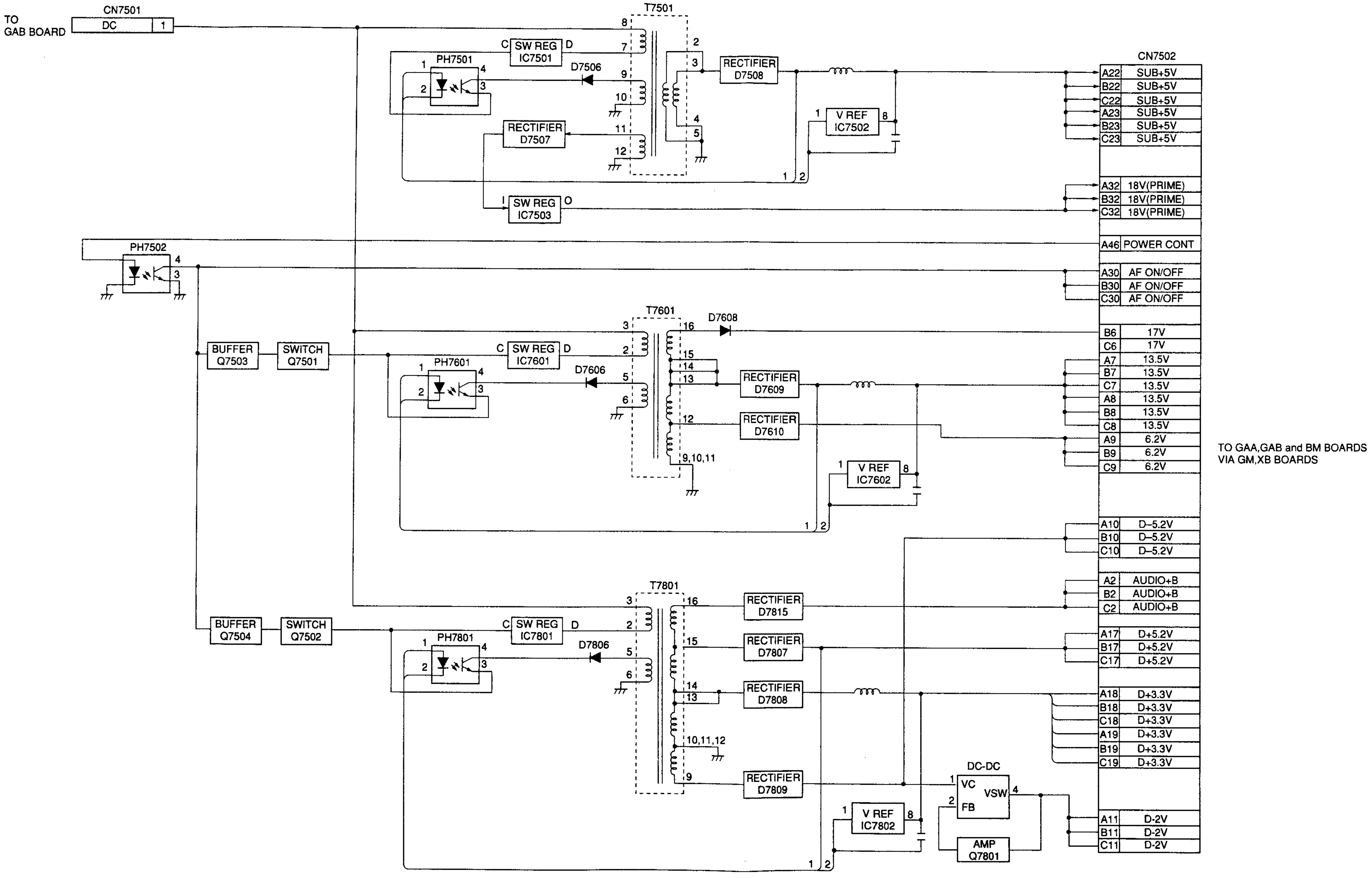
C BLOCK (1/2)


MCLK/2 1/2
MCLK/2 1/2
CN5001
MCLKP/2 1
MCLKN/2 2
HSYNC-P 3
HSYNC-N 4
VSYNC-N 6
VSYNC-P 5
SELECT 13
TO BB BOARD
IC5402
LEVEL SHIFT
B IN
B IN
C IN
C IN
D IN
D IN
B OUT
C OUT
D OUT
IC5004
BUFFER
IC5403
TG
MCLK/2
HSYNC
VSYNC
SELECT
SCLK
MODE
ISPEN
SDI
SDO
SLFR
DIR CON
PCG
ENB
VST
VCK
HST
HCK1
HCK2
FRP
RB DIR
PRG
CN5401
SCLK 1
MODE 3
ISPENE 5
SDI 6
SDO 7
1/2 SLFR
1/2 SELECT OUT
1/2 CLP
1/2 DIR-CON
IC5406
INVERTER
IC5406
INVERTER
PCG
ENB
VST
VCK
IC5405
INVERTER
HST
HCK1R
HCK1G
HCK1B
HCK2R
HCK2G
HCK2B
FRP
IC5406
INVERTER
P 1/2
RB-DIR 1/2
PRG 1/2
IC5005
5V-4
TEMP DET
TH5001
D5001
CLIP
A INV Y
INQ
Q5001
CN5001
12 TEMP PLOT
11 FAN PROT
TO BB BOARD
D5004
OR
D5005
OR
D5006
OR
CN5007
2 FAN PROT 1
CN5008
2 FAN PROT 2
CN5009
2 FAN PROT 3
TO FAN
IC5011(1/2)
INVERTER
IC5011(2/2)
INVERTER
+17V
15.5V REG
IC5002
+15.5V
12V REG
IC5003
+12V
5V-2
5V-2
SUB5V
5V-4
+6V
5V REG
IC5001
A-5V
+6V
5V REG
IC5013
D5V
IC5007
DC/DC CONVERTER
VIN
VSW
FB
D5003
-5V
+13V
12V REG
IC5012
+12V
CN5002
SHIFT+ 3
SHIFT- 4
ZOOM+ 5
ZOOM- 6
FOCUS+ 7
FOCUS- 8
SPR+ 25
SPR- 26
SPL+ 27
SPL- 28
CUR-PROT-CB 30
TO
BC BOARD
CN5004
5 SHIFT+
6 SHIFT-
1 ZOOM+
2 ZOOM-
3 FOCUS+
FOCUS-
TO
ZOOM, SHIFT, FOCUS MOTOR
CN5005
1 SPR+
2 SPR-
(R)
CN5006
1 SPL+
2 SPL-
(L)
CN5004
1 CUR-PROT-CB
2 PULL5V
5V
CN751
CUR-PROT-CB 1
PULL5V 2
CVR-PROT
S751
UC

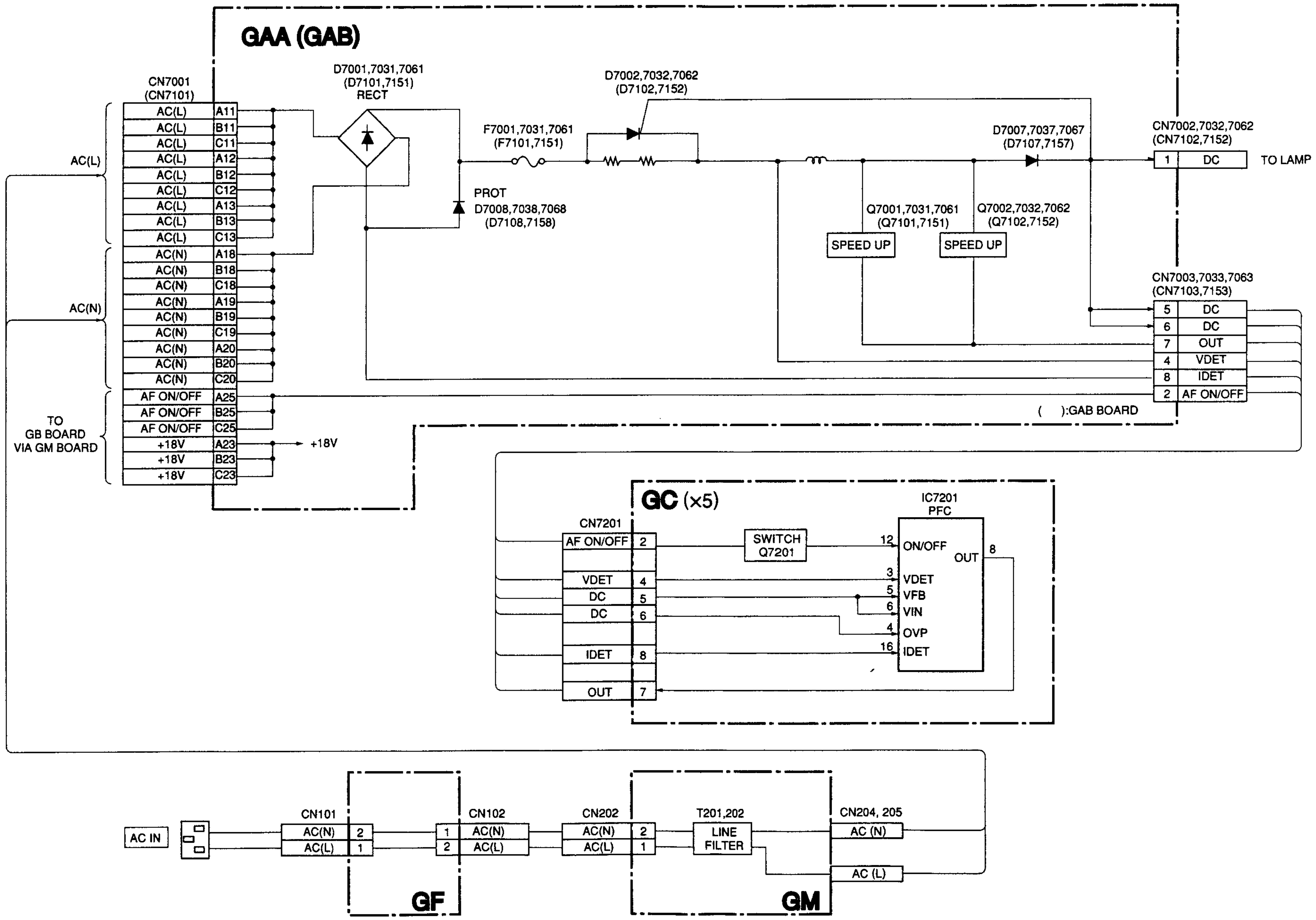
C (2/2), UC BLOCK


TO M BOARD VIA XC,BM BOARDS
CN6003
LIGHT 2
SCL-H 3
SDA-H 4
+5V
LED DRIVER Q6312
Q6314
LED DRIVER Q6311
Q6313
D6301 PIC
D6304 AUDIO
D6307 APA
D6310 VIDEO
D6313 SELECT
D6316 INPUT-A
D6319 INPUT-B
D6322 INPUT-C
D6325 VOLUME+
D6328 VOLUME−
D6331 PATTERN
IC6301 DA
20 SCL D0/A012 I D7/A05
21 SDA
5-12
2,4,6,8
11,13,15,17
IC6302 BUFFER
1A1-1A4 2A1-2A4
2Y4 2Y3 2Y2 2Y1 1Y4 1Y3 1Y2 1Y1
3 RIGHT
5 ENTER
7 RESET
9 ZOOM
12 MENU
14 UP
16 DOWN
18 LEFT
LED SW Q6301-6310
RIGHT ENTER LEFT RESET DOWN ZOOM UP SHIFT MENU FOCUS
D6302 D6303 D6308 D6309 D6314 D6315 D6320 D6321 D6326 D6327
D6305 D6306 D6311 D6312 D6317 D6318 D6323 D6324 D6329 D6330
IC6303 DA
20 SCL D0/A012 I D7/A05
21 SDA
5-12
2,4,6,8
11,13,15,17
IC6304 BUFFER
1A1-1A4 2A1-2A4
2Y2 2Y1 2Y3
7 SHIFT
9 FOCUS
5 BLCONT
TO LCD MODULE
CN6001
P-LED 1
LED DRIVER Q6002
LED DRIVER Q6001
+5V
TO M BOARD VIA XC, BM BOARDS
CN6003
PWR-LED 1
LED DRIVER Q6317
D6336 ON LED
+5V
D6335 ON
D6334 STANDBY
D6333 LIGHT
+5V
LED DRIVER Q6316
LED DRIVER Q6315
D6332 STANDBY
CN6002
LED-LAMP1 2
LED-LAMP2 3
LED-LAMP3 4
LED-LAMP4 5
LED-TEMP 6
LED-CVR 7
LED-FAN 8
LED-PWRSV 9
TO M BOARD VIA XC, BM BOARDS
D6204
D6203
SWITCH Q6212
SWITCH Q6213
SWITCH Q6217
SWITCH Q6214
SWITCH Q6218
SWITCH Q6208
SWITCH Q6206
SWITCH Q6207
SWITCH Q6205
LED DRIVER Q6209
LED DRIVER Q6210
LED DRIVER Q6215
LED DRIVER Q6211
LED DRIVER Q6216
LED DRIVER Q6204
LED DRIVER Q6202
LED DRIVER Q6203
LED DRIVER Q6201
LAMP FAIL DL6205
1 D6201
2 D6205
3 D6202
4 D6206
HIGH TEMP DL6204
COVER FAIL DL6202
FAN FAIL DL6203
POWER SAVING DL6201
TO M BOARD VIA CX, BM BOARDS
CN6004
KEY0 1
KEY1 2
KEY2 3
SIRCS-R 5
IC6001
1 IR-RX
(REAR)
SELECT S6101
VIDEO S6104
VOL− S6107
VOL+ S6110
PIC MUTE S6113
AUDIO MUTE S6116
STAND BY S6119
ON S6122
INPUT-C S6102
INPUT-B S6105
INPUT-A S6108
LIGHT S6111
FOCUS S6114
PIC SHIFT S6117
ZOOM S6120
PATTERN S6123
SHIFT S6103
RESET S6106
LEFT S6109
RIGHT S6112
DOWN S6115
UP S6118
ENTER S6121
MENU S6124

H BLOCK


TO
GAB BOARD
CN7501
DC
1
T7501
SW REG
IC7501
C
D
PH7501
D7506
RECTIFIER
D7507
RECTIFIER
D7508
V REF
IC7502
SW REG
IC7503
I
O
PH7502
T7601
D7608
BUFFER
Q7503
SWITCH
Q7501
SW REG
IC7601
PH7601
D7606
RECTIFIER
D7609
RECTIFIER
D7610
V REF
IC7602
9,10,11
T7801
BUFFER
Q7504
SWITCH
Q7502
SW REG
IC7801
PH7801
D7806
RECTIFIER
D7815
RECTIFIER
D7807
RECTIFIER
D7808
10,11,12
RECTIFIER
D7809
V REF
IC7802
DC-DC
VC
VSW
FB
AMP
Q7801
CN7502
A22 SUB+5V
B22 SUB+5V
C22 SUB+5V
A23 SUB+5V
B23 SUB+5V
C23 SUB+5V
A32 18V(PRIME)
B32 18V(PRIME)
C32 18V(PRIME)
A46 POWER CONT
A30 AF ON/OFF
B30 AF ON/OFF
C30 AF ON/OFF
B6 17V
C6 17V
A7 13.5V
B7 13.5V
C7 13.5V
A8 13.5V
B8 13.5V
C8 13.5V
A9 6.2V
B9 6.2V
C9 6.2V
A10 D–5.2V
B10 D–5.2V
C10 D–5.2V
A2 AUDIO+B
B2 AUDIO+B
C2 AUDIO+B
A17 D+5.2V
B17 D+5.2V
C17 D+5.2V
A18 D+3.3V
B18 D+3.3V
C18 D+3.3V
A19 D+3.3V
B19 D+3.3V
C19 D+3.3V
A11 D-2V
B11 D-2V
C11 D-2V
TO GAA,GAB and BM BOARDS
VIA GM,XB BOARDS

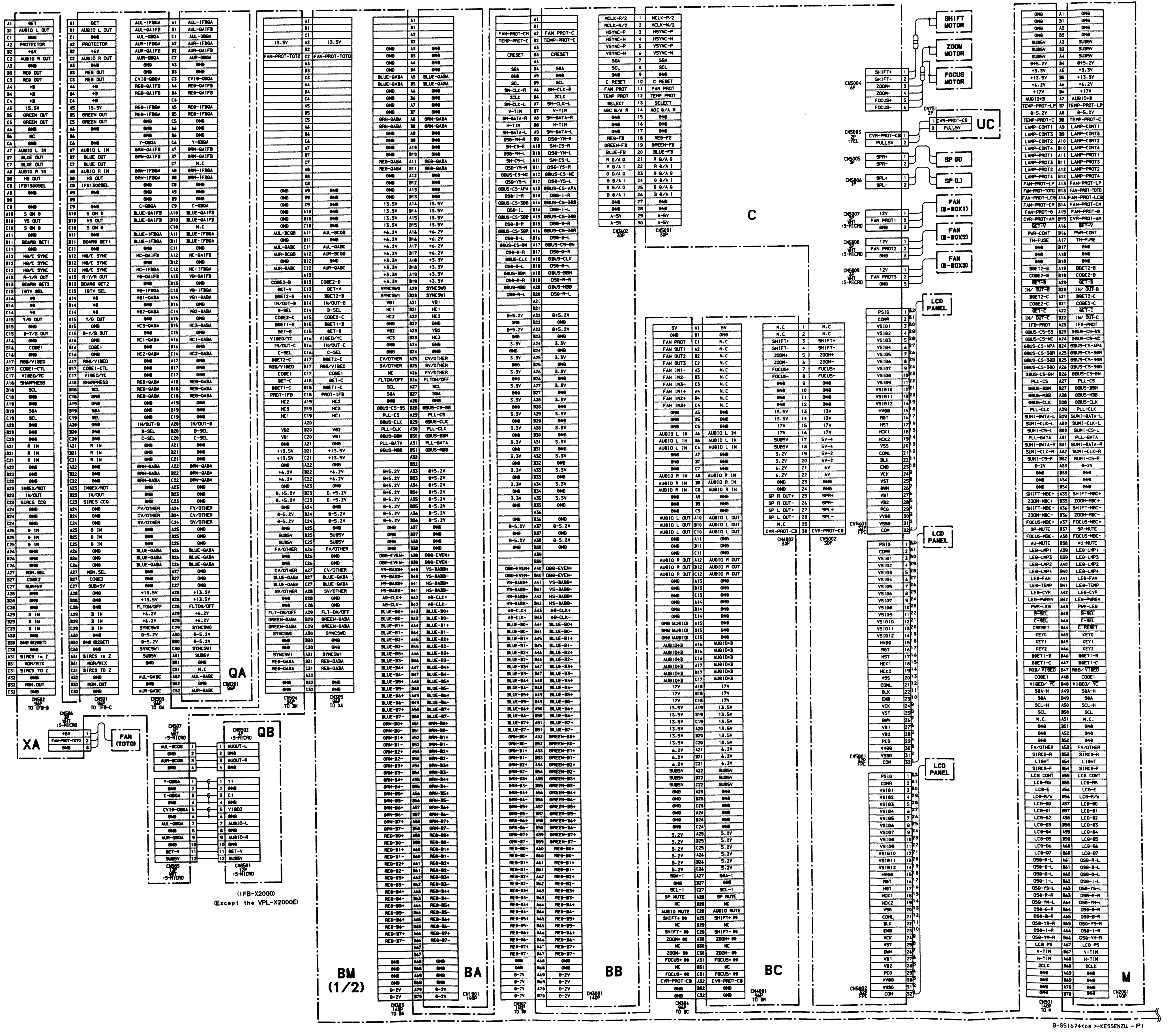
GB BLOCK

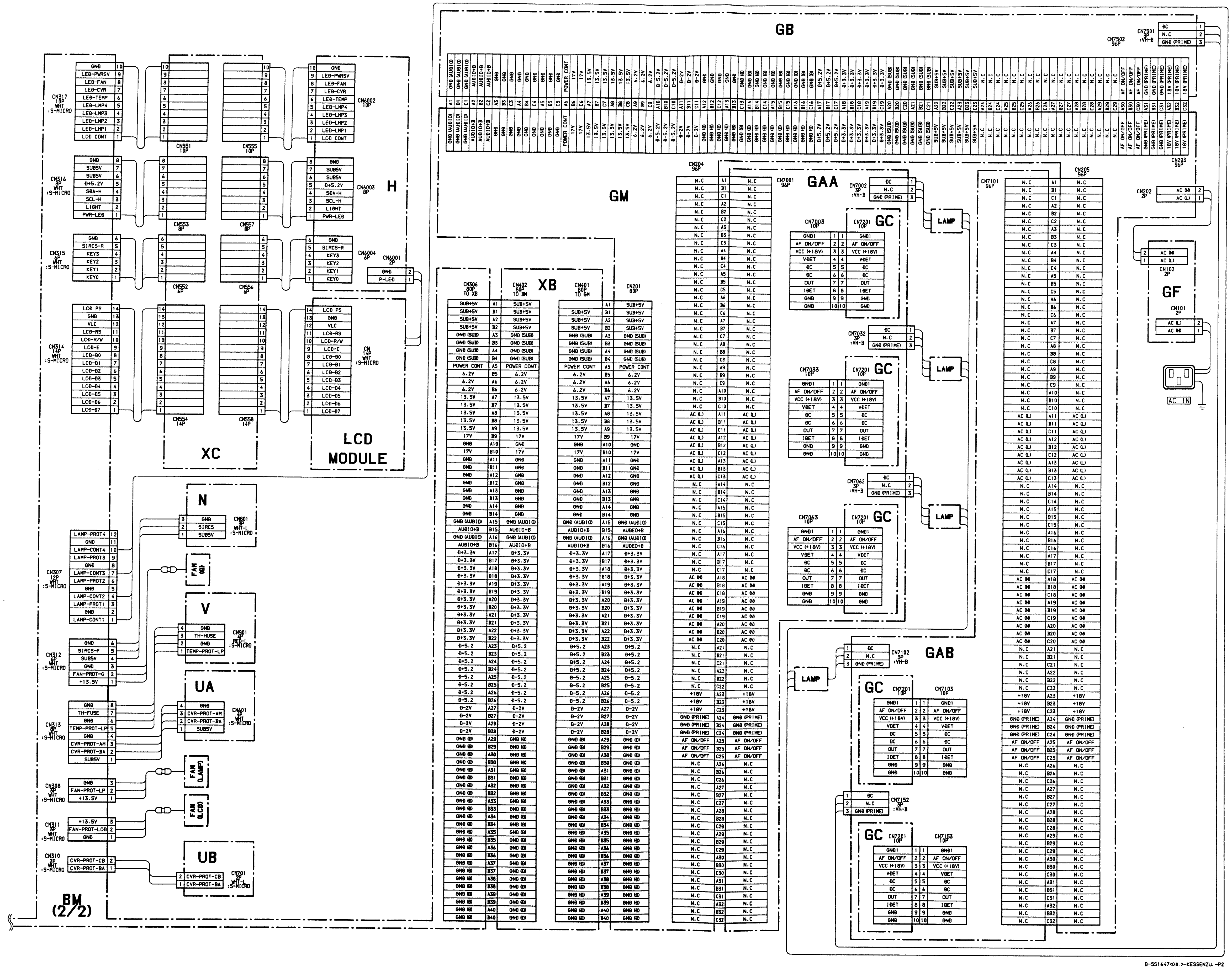

GAA (GAB)
CN7001
(CN7101)
AC(L) A11
AC(L) B11
AC(L) C11
AC(L) A12
AC(L) B12
AC(L) C12
AC(L) A13
AC(L) B13
AC(L) C13
AC(N) A18
AC(N) B18
AC(N) C18
AC(N) A19
AC(N) B19
AC(N) C19
AC(N) A20
AC(N) B20
AC(N) C20
AF ON/OFF A25
AF ON/OFF B25
AF ON/OFF C25
+18V A23
+18V B23
+18V C23
AC(L)
AC(N)
TO
GB BOARD
VIA GM BOARD
+18V
D7001,7031,7061
(D7101,7151)
RECT
F7001,7031,7061
(F7101,7151)
PROT
D7008,7038,7068
(D7108,7158)
D7002,7032,7062
(D7102,7152)
D7007,7037,7067
(D7107,7157)
Q7001,7031,7061
(Q7101,7151)
SPEED UP
Q7002,7032,7062
(Q7102,7152)
SPEED UP
CN7002,7032,7062
(CN7102,7152)
1 DC
TO LAMP
CN7003,7033,7063
(CN7103,7153)
5 DC
6 DC
7 OUT
4 VDET
8 IDET
2 AF ON/OFF
( ):GAB BOARD
GC (×5)
CN7201
AF ON/OFF 2
VDET 4
DC 5
DC 6
IDET 8
OUT 7
SWITCH
Q7201
IC7201
PFC
12 ON/OFF
OUT 8
3 VDET
5 VFB
6 VIN
4 OVP
16 IDET
AC IN
CN101
AC(N) 2
AC(L) 1
CN102
1 AC(N)
2 AC(L)
GF
CN202
AC(N) 2
AC(L) 1
T201,202
LINE
FILTER
CN204, 205
AC (N)
AC (L)
GM

GAA (GAB), GC, GF, GM BLOCK

Section 10 Diagrams

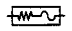
10-1. Frame Schematic Diagram


QA
QB
XA
FAN (TOTO)
(IFB-X2000)
(Except the VPL-X2000E)
BM (1/2)
BA
BB
BC
C
M
UC
SHIFT MOTOR
ZOOM MOTOR
FOCUS MOTOR
SP (R)
SP (L)
FAN (B-BOX1)
FAN (B-BOX2)
FAN (B-BOX3)
LCD PANEL
LCD PANEL
LCD PANEL
B-SS1674<08>-KESSENZU-P1
1
2
3
4
5
A
B
C
D
E
F
G
H


GB
GM
GAA
GAB
GC
GF
XB
XC
H
LCD MODULE
N
V
UA
UB
BM (2/2)
LAMP
FAN (G)
FAN (LAMP)
FAN (LCD)
AC IN
CN317 10P WHT :S-MICRO
CN316 8P WHT :S-MICRO
CN315 6P WHT :S-MICRO
CN314 14P WHT :S-MICRO
CN307 12P WHT :S-MICRO
CN312 6P WHT :S-MICRO
CN313 8P WHT :S-MICRO
CN308 3P WHT :S-MICRO
CN311 3P WHT :S-MICRO
CN310 2P WHT :S-MICRO
CN551 10P
CN555 10P
CN553 8P
CN557 8P
CN552 6P
CN556 6P
CN554 14P
CN558 14P
CN6002 10P
CN6003 8P
CN6004 6P
CN6001 2P
CN 14P WHT :S-MICRO
CN801 3P WHT :S-MICRO
CN901 4P RED :S-MICRO
CN401 4P WHT :S-MICRO
CN701 2P WHT :S-MICRO
CN304 80P TO XB
CN402 80P TO BM
CN401 80P TO GM
CN201 80P
CN204 96P
CN7001 96P
CN7002 3P :VH-B
CN7003 10P
CN7201 10P
CN7032 3P :VH-B
CN7033 10P
CN7062 3P :VH-B
CN7063 10P
CN7101 96P
CN7102 3P :VH-B
CN7103 10P
CN7152 3P :VH-B
CN7153 10P
CN205 96P
CN202 2P
CN203 96P
CN7501 3P :VH-B
CN7502 96P
CN102 2P
CN101 2P
LED-PWRSV
LED-FAN
LED-CVR
LED-TEMP
LED-LMP4
LED-LMP3
LED-LMP2
LED-LMP1
LCD CONT
SUB5V
D+5.2V
SDA-H
SCL-H
LIGHT
PWR-LED
SIRCS-R
KEY3
KEY2
KEY1
KEY0
P-LED
LCD PS
VLC
LCD-RS
LCD-R/W
LCD-E
LCD-D0
LCD-D1
LCD-D2
LCD-D3
LCD-D4
LCD-D5
LCD-D6
LCD-D7
LAMP-PROT4
LAMP-CONT4
LAMP-PROT3
LAMP-CONT3
LAMP-PROT2
LAMP-CONT2
LAMP-PROT1
LAMP-CONT1
SIRCS-F
FAN-PROT-G
+13.5V
TH-FUSE
TEMP-PROT-LP
CVR-PROT-AM
CVR-PROT-BA
FAN-PROT-LP
FAN-PROT-LCD
CVR-PROT-CB
GND
SUB+5V
GND (SUB)
POWER CONT
6.2V
13.5V
17V
GND (AUDIO)
AUDIO+B
D+3.3V
D+5.2
D-5.2
D-2V
GND (D)
N.C
AC (L)
AC (N)
+18V
GND (PRIME)
AF ON/OFF
GC
VCC (+18V)
VDET
OUT
IDET
GND1
8-SS1647<08>-KESSENZU-P2
1
2
3
4
5

10-2. Schematic Diagrams and Printed Wiring Boards

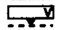
Note:

- Parts marked " * " differ according to the model/destination. Refer to the mount table for each function.
- The parts marked " # " on schematic diagrams are not mounted.
- All capacitors are in µF unless otherwise noted. pF: µµF 50WV or less are not indicated except for electrolytics.
- All electrolytics are in 50 V unless otherwise specified.
-  : fusible resistor
- : nonflammable resistor
- ▭ : panel designation and adjustment for repair
- Caution when replacing chip parts
  New parts must be attached after removal of the chip.
  Be careful not to heat the minus side of a tantalum capacitor, because it is easily damaged by the heat.

Reference information

RESISTOR	RN	: METAL FILM
	RC	: SOLID
	FPRD	: NONFLAMMABLE CARBON
	FUSE	: NONFLAMMABLE FUSIBLE
	RS	: NONFLAMMABLE METAL OXIDE
	RB	: NONFLAMMABLE CEMENT
	RW	: NONFLAMMABLE WIREWOUND
		: ADJUSTMENT RESISTOR
	※	
COIL	LF-8L	: MICRO INDUCTOR
CAPACITOR	TA	: TANTALUM
	PS	: STYROL
	PP	: POLYPROPYLENE
	PT	: MYLAR
	MPS	: METALIZED POLYESTER
	MPP	: METALIZED POLYPROPYLENE
	ALB	: BIPOLAR
	ALT	: HIGH TEMPERATURE
	ALR	: HIGH RIPPLE

[Measuring conditions, voltage and waveform]

- A voltage value is the reference value between the measurement point and the earth, when the NTSC color bar signal is received from the color bar generator (digital multi-meter used: 10 M ohms/V DC).
- A voltage value is the reference value between the measurement point and the earth, when the NTSC color bar signal and RGB color bar signal are received from the color bar generator (digital multi-meter used: 10 M ohms/V DC).
- Unit of voltage is V (volt).
- : B+line
   : B– line
- Voltage variations may occur due to normal production tolerances.
- No mark : NTSC (3.58 MHz) color bar signal.
- [ ] : RGB color bar signal is received.
- Circled numbers indicate the reference waveform.
- ⇨ : Signal path.

The components identified marked ⚠ are critical for safety.
Replace only with the part number specified.

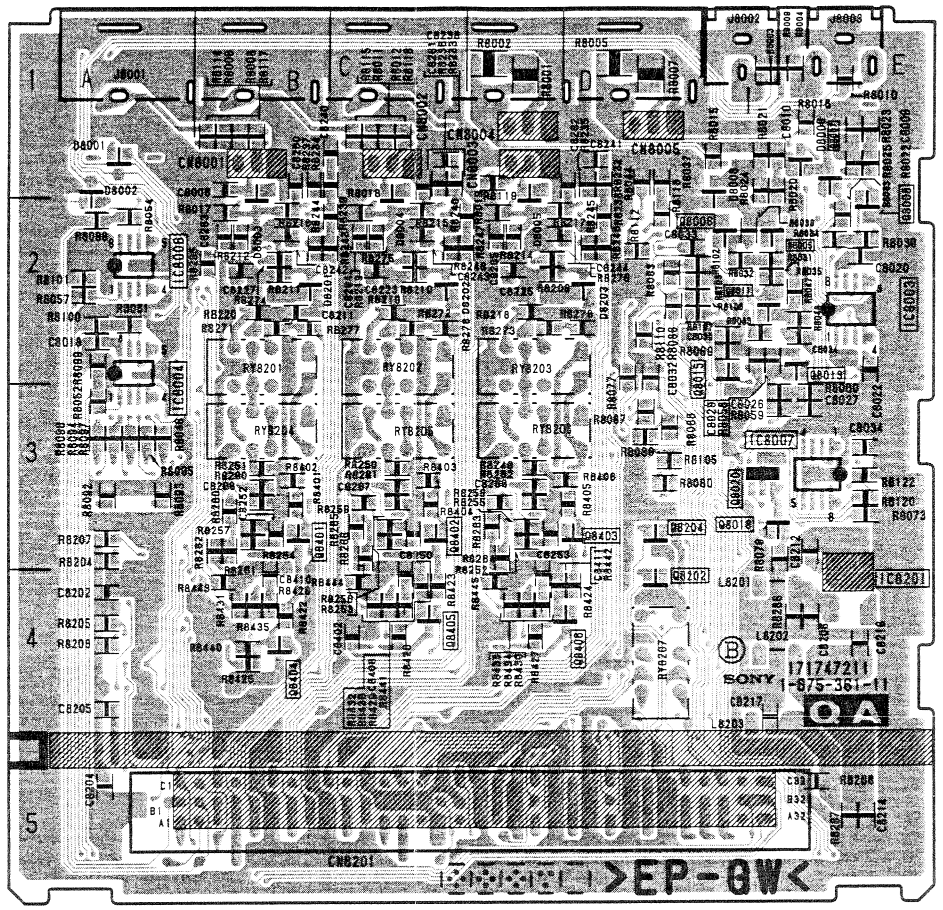
Les composants identifiés par la marque ⚠ sont critiques pour la sécurité.
Ne les remplacer que par une pièce portant le numéro spécifié.

QA

1-675-381-11

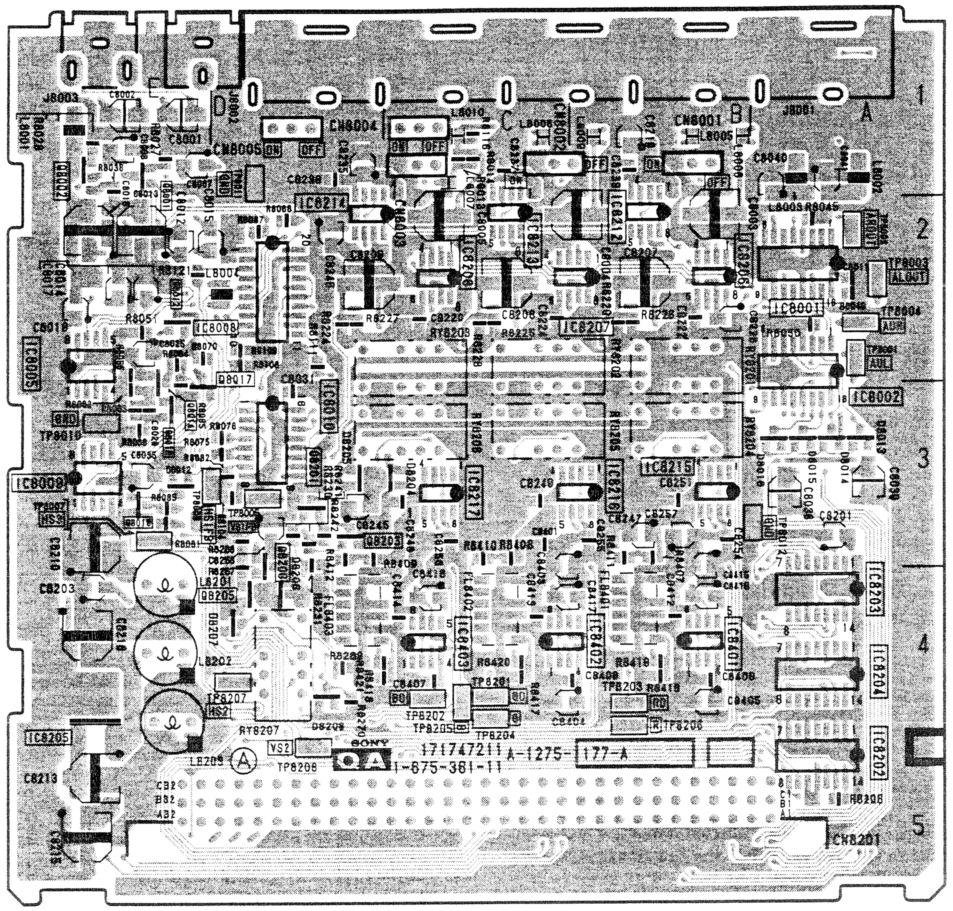
Ref.	Location
IC8001	A-2
IC8002	A-3
IC8003	* E-2
IC8004	* A-2
IC8005	E-2
IC8006	* A-2
IC8007	* E-3
IC8008	D-2
IC8009	E-3
IC8010	D-3
IC8201	* E-4
IC8202	A-5
IC8203	A-4
IC8204	A-4
IC8205	E-4
IC8206	B-2
IC8207	B-2
IC8208	C-2
IC8212	B-2
IC8213	C-2
IC8214	D-2
IC8215	B-3
IC8216	B-3
IC8217	C-3
IC8401	B-4
IC8402	B-4
IC8403	C-4
Q8001	E-1
Q8002	E-1
Q8005	* E-2
Q8006	* D-2
Q8007	* E-1
Q8008	* E-1
Q8011	* E-2
Q8012	E-2
Q8013	* E-2
Q8014	E-3
Q8015	* D-2
Q8016	E-3
Q8017	D-2
Q8018	* E-3
Q8019	E-3
Q8020	* E-3
Q8201	D-3
Q8202	* D-4
Q8203	D-3
Q8204	* D-3
Q8205	D-4
Q8206	D-3
Q8401	* B-3
Q8402	* C-3
Q8403	* D-3
Q8404	* B-4
Q8405	* C-4
Q8406	* D-4
TP8001	A-2
TP8002	A-2
TP8003	A-2
TP8004	A-2
TP8005	D-3
TP8006	E-3
TP8007	E-3
TP8010	E-3
TP8011	D-1
TP8012	A-3
TP8201	C-4
TP8202	C-4
TP8203	B-4
TP8204	C-4
TP8205	C-4
TP8206	D-5
TP8207	D-4

*:B Side mount


1
2
3
4
5
A
B
C
D
E
RY8201
RY8202
RY8203
IC8201
SONY
171747211
1-675-381-11
QA
CN8201
EP-0W

QA - B SIDE -

SUFFIX ; -11

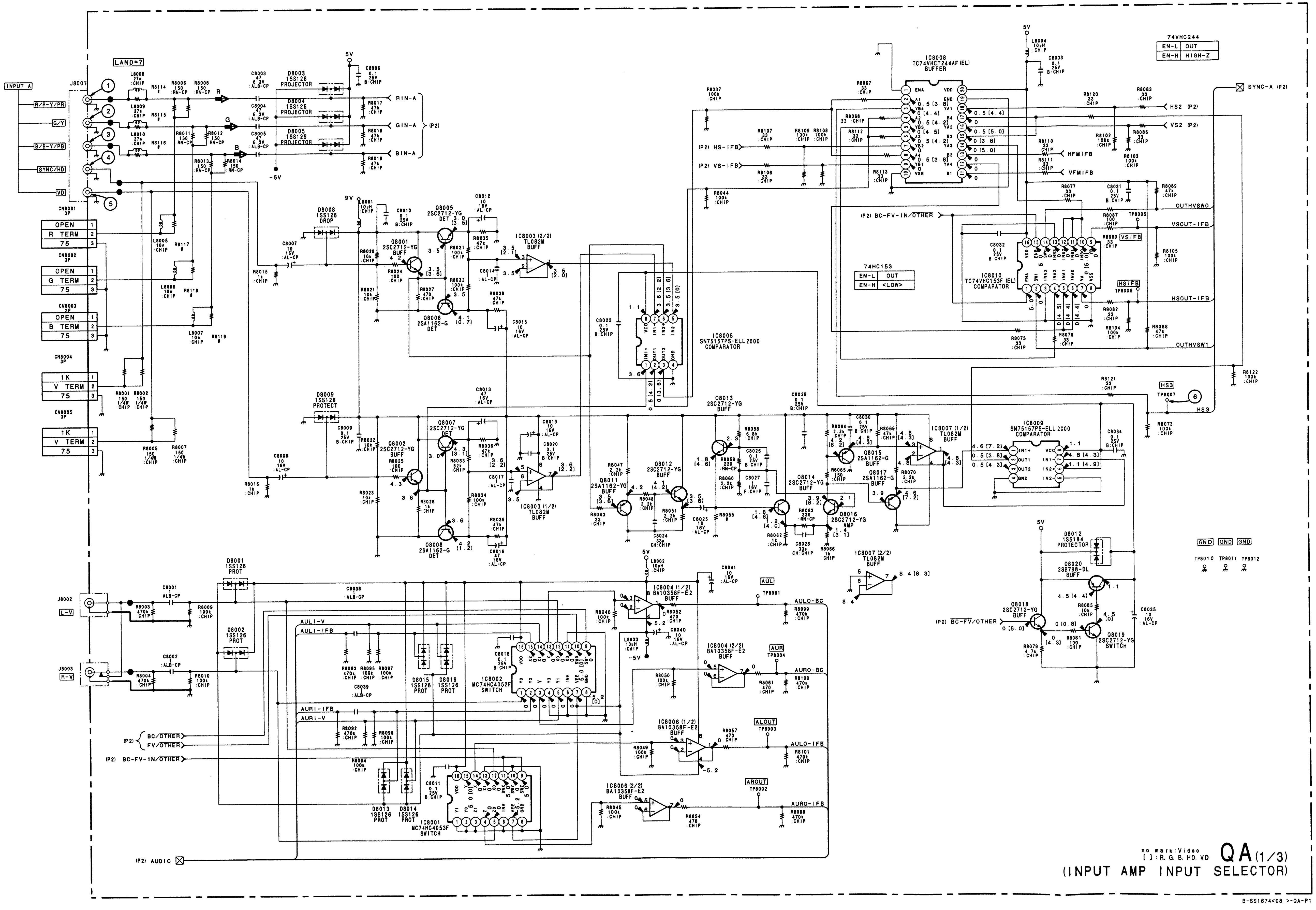

1
2
3
4
5
A
B
C
D
CN8001
CN8004
CN8005
IC8001
IC8002
IC8203
IC8204
IC8202
IC8205
RY8207
SONY
QA
171747211
A-1275-177-A
1-675-381-11
CN8201

QA - A SIDE -

SUFFIX ; -11

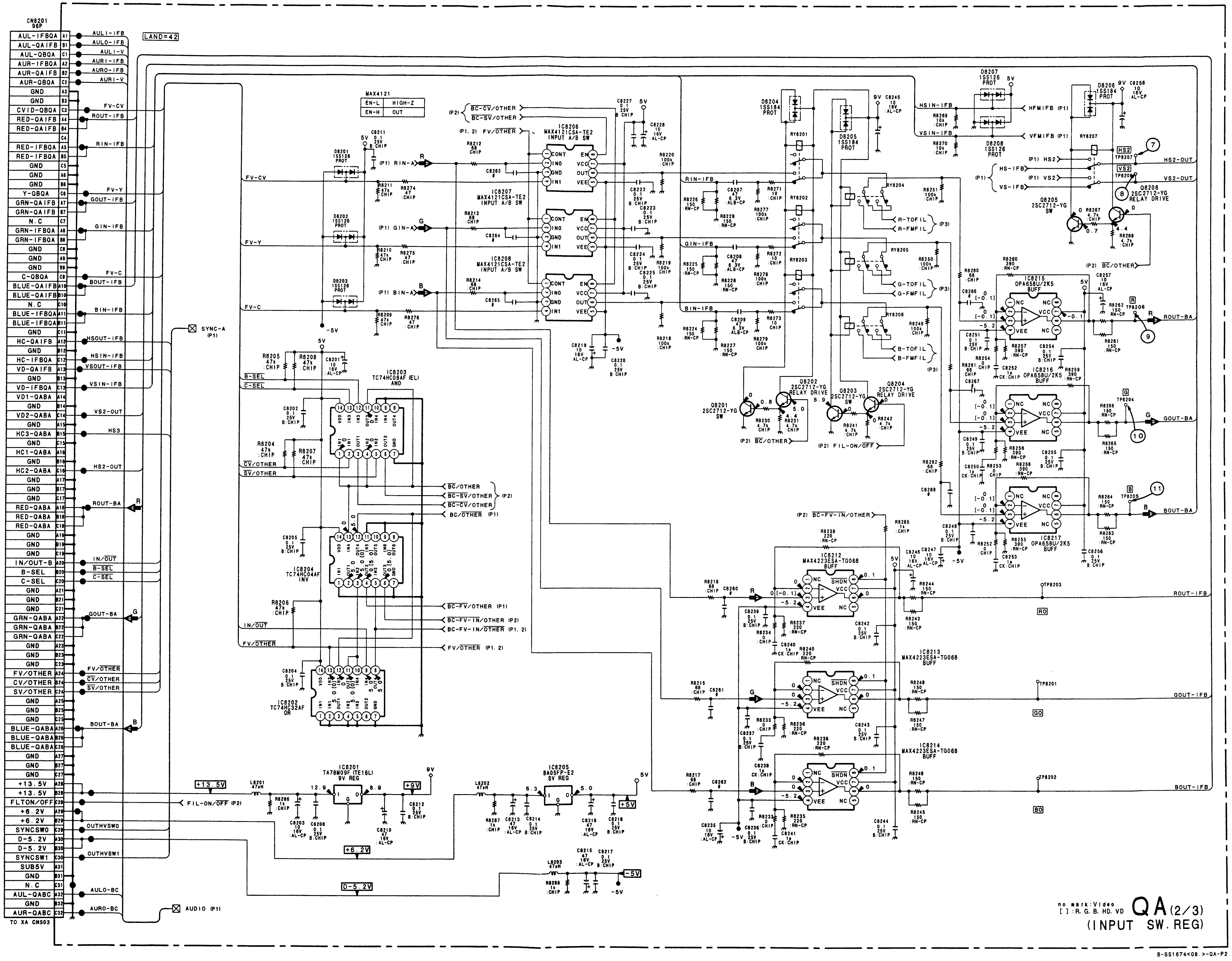
A B C D E F G H

- Refer to page 10-4 for Printed Wiring Board
- Refer to page 10-7 for Waveforms
- Refer to page 10-8 for IC Block Diagrams


INPUT A
R/R-Y/PR
G/Y
B/B-Y/PB
SYNC/HD
VD
J8001
LAND=7
CN8001 3P
OPEN
R TERM
75
CN8002 3P
OPEN
G TERM
75
CN8003 3P
OPEN
B TERM
75
CN8004 3P
1K
V TERM
75
CN8005 3P
1K
V TERM
75
D8003 1SS126 PROJECTOR
D8004 1SS126 PROJECTOR
D8005 1SS126 PROJECTOR
RIN-A
GIN-A
BIN-A
(P2)
5V
-5V
9V
D8008 1SS126 DROP
Q8001 2SC2712-YG BUFF
Q8005 2SC2712-YG DET
Q8006 2SA1162-G DET
IC8003 (2/2) TL082M BUFF
D8009 1SS126 PROTECT
Q8002 2SC2712-YG BUFF
Q8007 2SC2712-YG DET
Q8008 2SA1162-G DET
IC8003 (1/2) TL082M BUFF
IC8005 SN75157PS-ELL2000 COMPARATOR
IC8008 TC74VHCT244AF(EL) BUFFER
74VHC244
EN-L OUT
EN-H HIGH-Z
SYNC-A (P2)
HS2 (P2)
VS2 (P2)
(P2) HS-IFB
(P2) VS-IFB
HFMIFB
VFMIFB
(P2) BC-FV-IN/OTHER
74HC153
EN-L OUT
EN-H <LOW>
IC8010 TC74VHC153F(EL) COMPARATOR
VSIFB
HSIFB
OUTHVSWO
VSOUT-IFB
HSOUT-IFB
OUTHVSW1
HS3
TP8007
Q8013 2SC2712-YG BUFF
Q8011 2SA1162-YG BUFF
Q8012 2SC2712-YG BUFF
Q8014 2SC2712-YG AMP
Q8015 2SA1162-G BUFF
Q8016 2SC2712-YG
Q8017 2SA1162-G BUFF
IC8007 (1/2) TL082M BUFF
IC8009 SN75157PS-ELL 2000 COMPARATOR
IC8007 (2/2) TL082M BUFF
D8012 1SS184 PROTECTOR
Q8020 2SB798-DL BUFF
Q8018 2SC2712-YG BUFF
Q8019 2SC2712-YG SWITCH
(P2) BC-FV/OTHER
GND GND GND
TP8010 TP8011 TP8012
J8002
L-V
J8003
R-V
D8001 1SS126 PROT
D8002 1SS126 PROT
AULI-V
AULI-IFB
AURI-IFB
AURI-V
D8015 1SS126 PROT
D8016 1SS126 PROT
IC8002 MC74HC4052F SWITCH
D8013 1SS126 PROT
D8014 1SS126 PROT
IC8001 MC74HC4053F SWITCH
(P2) BC/OTHER
FV/OTHER
(P2) BC-FV-IN/OTHER
(P2) AUDIO
IC8004 (1/2) BA10358F-E2 BUFF
IC8004 (2/2) BA10358F-E2 BUFF
IC8006 (1/2) BA10358F-E2 BUFF
IC8006 (2/2) BA10358F-E2 BUFF
AUL
TP8001
AULO-BC
AUR
TP8004
AURO-BC
ALOUT
TP8003
AULO-IFB
AROUT
TP8002
AURO-IFB
no mark: Video
[ ] : R. G. B. HD. VD
QA(1/3)
(INPUT AMP INPUT SELECTOR)
B-SS1674<08 >-QA-P1
1
2
3
4
5

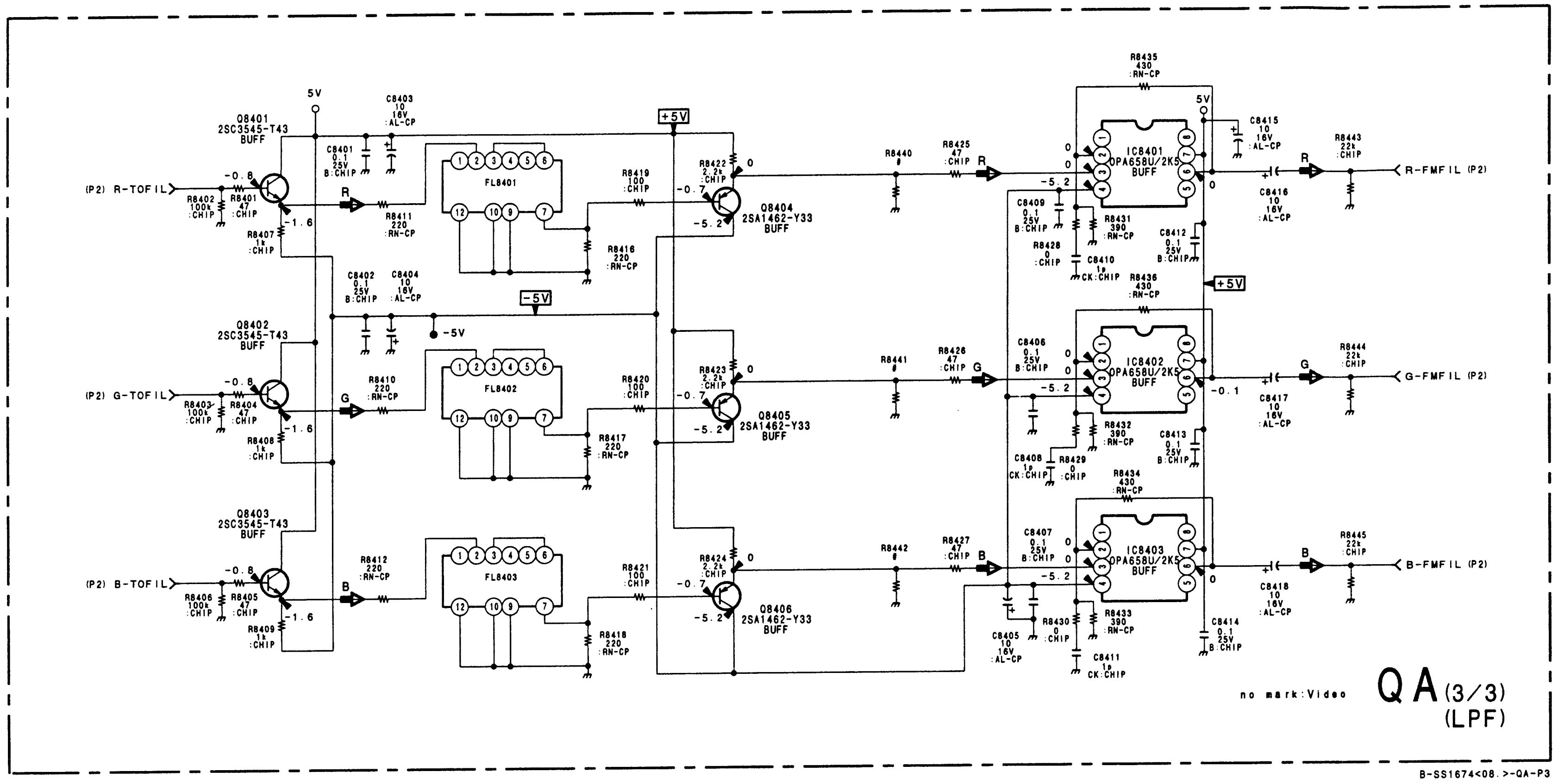
QA (2/3)

- Refer to page 10-4 for Printed Wiring Board
- Refer to page 10-7 for Waveforms
- Refer to page 10-8 for IC Block Diagrams

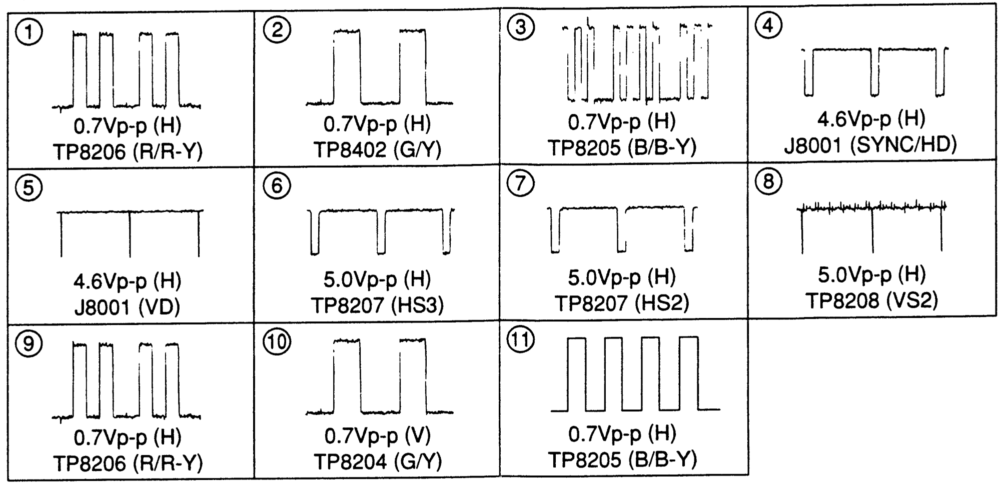

1
2
3
4
5
A
B
C
D
E
F
G
H
CN8201 96P
AUL-IFBQA
AUL-QAIFB
AUL-QBQA
AUR-IFBQA
AUR-QAIFB
AUR-QBQA
CVID-QBQA
RED-QAIFB
RED-IFBQA
Y-QBQA
GRN-QAIFB
GRN-IFBQA
C-QBQA
BLUE-QAIFB
BLUE-IFBQA
HC-QAIFB
HC-IFBQA
VD-QAIFB
VD-IFBQA
VD1-QABA
VD2-QABA
HC3-QABA
HC1-QABA
HC2-QABA
RED-QABA
IN/OUT-B
B-SEL
C-SEL
GRN-QABA
FV/OTHER
CV/OTHER
SV/OTHER
BLUE-QABA
+13.5V
FLTON/OFF
+6.2V
SYNCSW0
D-5.2V
SYNCSW1
SUB5V
GND
N.C
AUL-QABC
AUR-QABC
TO XA CN503
LAND=42
FV-CV
FV-Y
FV-C
RIN-IFB
GIN-IFB
BIN-IFB
HSOUT-IFB
HSIN-IFB
VSOUT-IFB
VSIN-IFB
VS2-OUT
HS3
HS2-OUT
ROUT-BA
GOUT-BA
BOUT-BA
OUTHVSW0
OUTHVSW1
AULO-BC
AURO-BC
SYNC-A (P1)
AUDIO (P1)
MAX4121
EN-L HIGH-Z
EN-H OUT
IC8206 MAX4121CSA-TE2 INPUT A/B SW
IC8207 MAX4121CSA-TE2 INPUT A/B SW
IC8208 MAX4121CSA-TE2 INPUT A/B SW
D8201 1SS126 PROT
D8202 1SS126 PROT
D8203 1SS126 PROT
IC8203 TC74HC08AF (EL) AND
IC8204 TC74HC04AF INV
IC8202 TC74HC32AF OR
IC8201 TA78M09F (TE16L) 9V REG
IC8205 BA05FP-E2 5V REG
D8204 1SS184 PROT
D8205 1SS184 PROT
D8206 1SS184 PROT
D8207 1SS126 PROT
D8208 1SS126 PROT
RY8201
RY8202
RY8203
RY8204
RY8205
RY8206
RY8207
Q8201 2SC2712-YG SW
Q8202 2SC2712-YG RELAY DRIVE
Q8203 2SC2712-YG SW
Q8204 2SC2712-YG RELAY DRIVE
Q8205 2SC2712-YG SW
Q8206 2SC2712-YG RELAY DRIVE
IC8215 OPA658U/2K5 BUFF
IC8216 OPA658U/2K5 BUFF
IC8217 OPA658U/2K5 BUFF
IC8212 MAX4223ESA-TG068 BUFF
IC8213 MAX4223ESA-TG068 BUFF
IC8214 MAX4223ESA-TG068 BUFF
HFMIFB (P1)
VFMIFB (P1)
HS-IFB
VS-IFB
R-TOFIL
R-FMFIL
G-TOFIL
G-FMFIL
B-TOFIL
B-FMFIL
BC-CV/OTHER
BC-SV/OTHER
BC/OTHER
BC-FV/OTHER (P1)
BC-FV-IN/OTHER (P2)
BC-FV-IN/OTHER (P1, 2)
FV/OTHER (P1, 2)
FIL-ON/OFF (P2)
ROUT-IFB
GOUT-IFB
BOUT-IFB
TP8201
TP8202
TP8203
TP8204
TP8205
TP8206
TP8207
TP8208
+13.5V
+9V
+6.2V
+5V
-5V
D-5.2V
no mark:Video
[ ]:R. G. B. HD. VD
QA(2/3)
(INPUT SW. REG)
8-SS1674<08.>-QA-P2

10-6

- Refer to page 10-4 for Printed Wiring Board
- Refer to page 10-7 for Waveforms
- Refer to page 10-8 for IC Block Diagrams


5V
+5V
-5V
Q8401
2SC3545-T43
BUFF
Q8402
2SC3545-T43
BUFF
Q8403
2SC3545-T43
BUFF
(P2) R-TOFIL
(P2) G-TOFIL
(P2) B-TOFIL
FL8401
FL8402
FL8403
Q8404
2SA1462-Y33
BUFF
Q8405
2SA1462-Y33
BUFF
Q8406
2SA1462-Y33
BUFF
IC8401
OPA658U/2K5
BUFF
IC8402
OPA658U/2K5
BUFF
IC8403
OPA658U/2K5
BUFF
R-FMFIL (P2)
G-FMFIL (P2)
B-FMFIL (P2)
R
G
B
-0.8
-1.6
-0.7
-5.2
-0.1
0
no mark:Video
QA (3/3)
(LPF)
B-SS1674<08.>-QA-P3

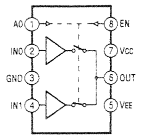
QA Board Waveforms



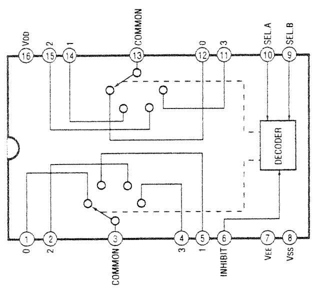
QA, QB (IFB-X2000E)

QA Board IC Block Diagrams

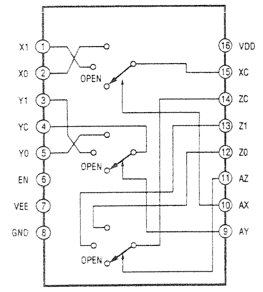
MAX4121CSA-TE2 (IC8206 – 8211)


A0
IN0
GND
IN1
EN
VCC
OUT
VEE

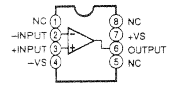
MC74HC4052AF-T2 (IC8002)


VDD
COMMON
SEL A
SEL B
DECODER
INHIBIT
VEE
VSS

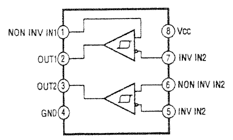
MC74HC4053F-T2 (IC8001)


X1
X0
Y1
YC
Y0
EN
VEE
GND
VDD
XC
ZC
Z1
Z0
AZ
AX
AY
OPEN
OPEN
OPEN

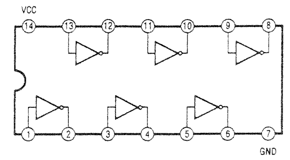
OPA658U-T2 (IC8012 – 8017, 8401 – 8403)


NC
–INPUT
+INPUT
–VS
NC
+VS
OUTPUT
NC

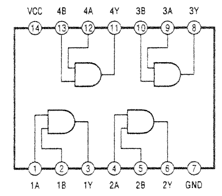
SN75157 (IC8009)


NON INV IN1
OUT1
OUT2
GND
Vcc
INV IN2
NON INV IN2
INV IN2

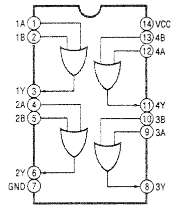
TC74HC04AF1 (IC8204)



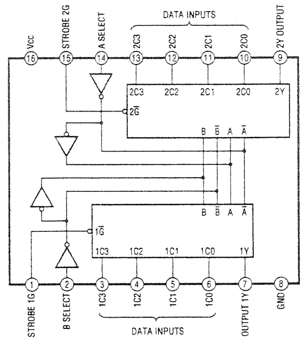
TC74HC08AF (IC8203)

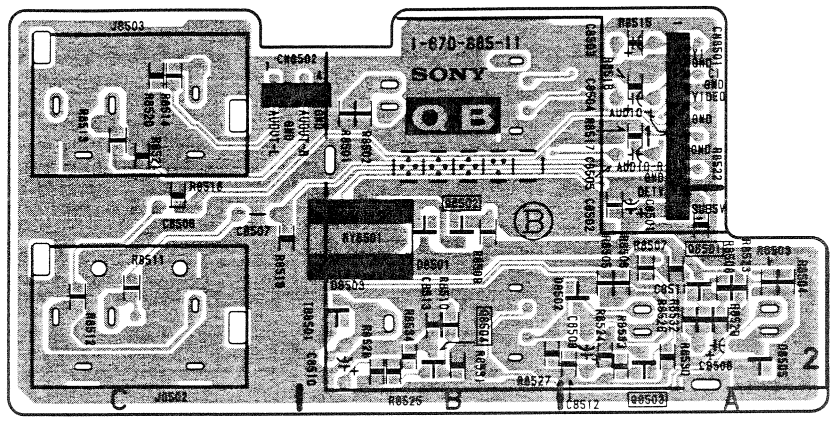

VCC
4B
4A
4Y
3B
3A
3Y
1A
1B
1Y
2A
2B
2Y
GND

TC74HC32AF (IC8202)


1A
1B
1Y
2A
2B
2Y
GND
VCC
4B
4A
4Y
3B
3A
3Y

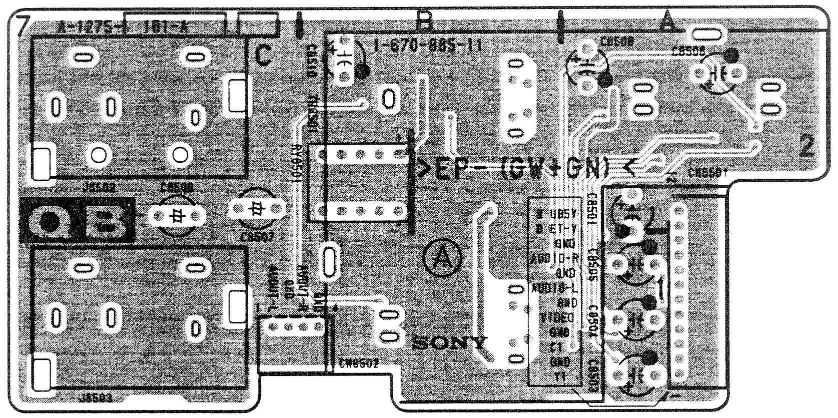
TC 74VHC153F (IC8010)


VCC
STROBE 2G
A SELECT
DATA INPUTS
2Y OUTPUT
STROBE 1G
B SELECT
DATA INPUTS
OUTPUT 1Y
GND


J8503
CN8502
1-670-885-11
SONY
QB
J8502
C
B
A
2

QB – B SIDE –

SUFFIX ; -11

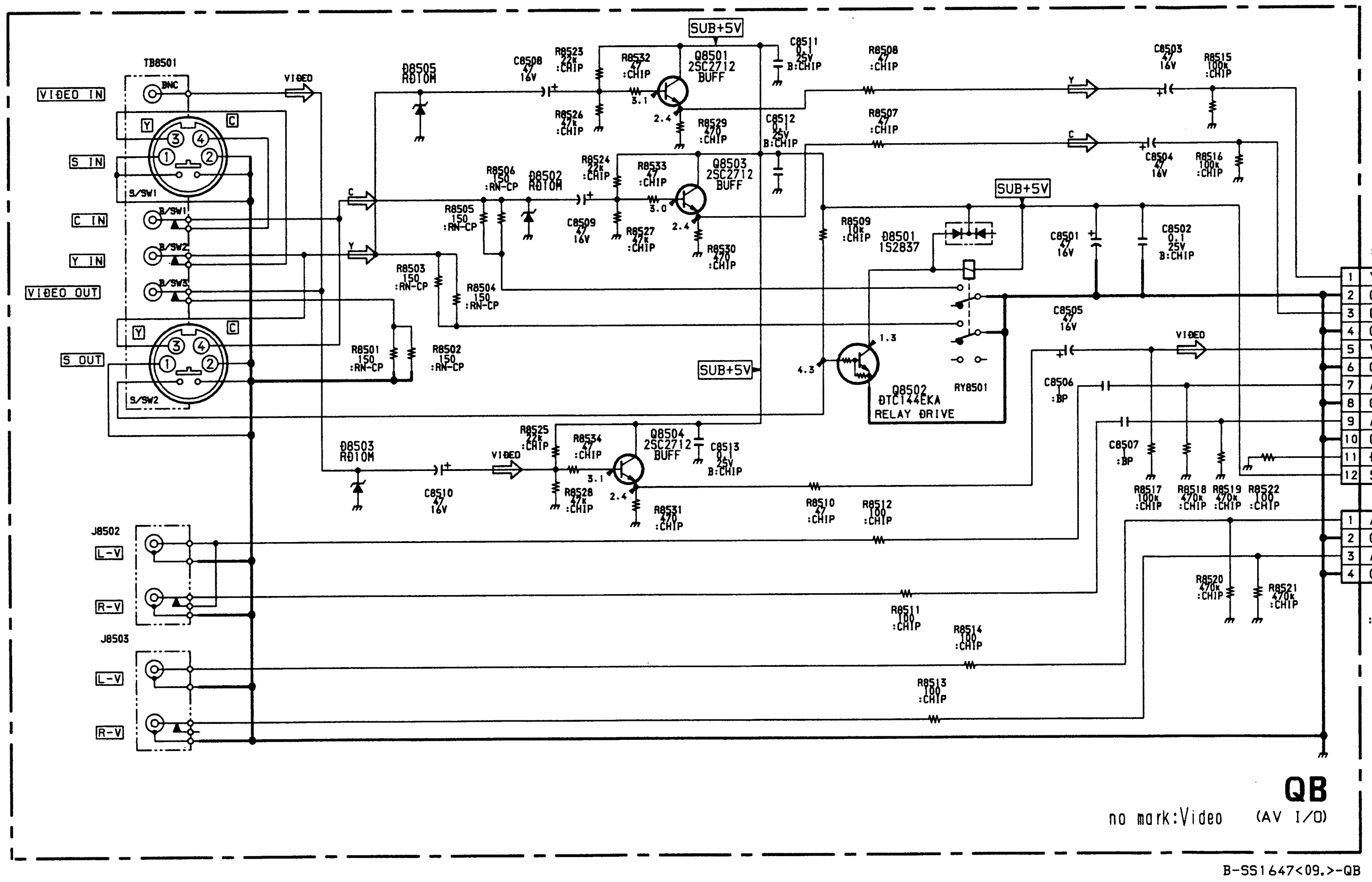

7
A-1275-181-A
B
A
C
1-670-885-11
>EP=(GW+GN)<
2
QB
A
SONY
J8502
J8503
CN8502

QB – A SIDE –

SUFFIX ; -11

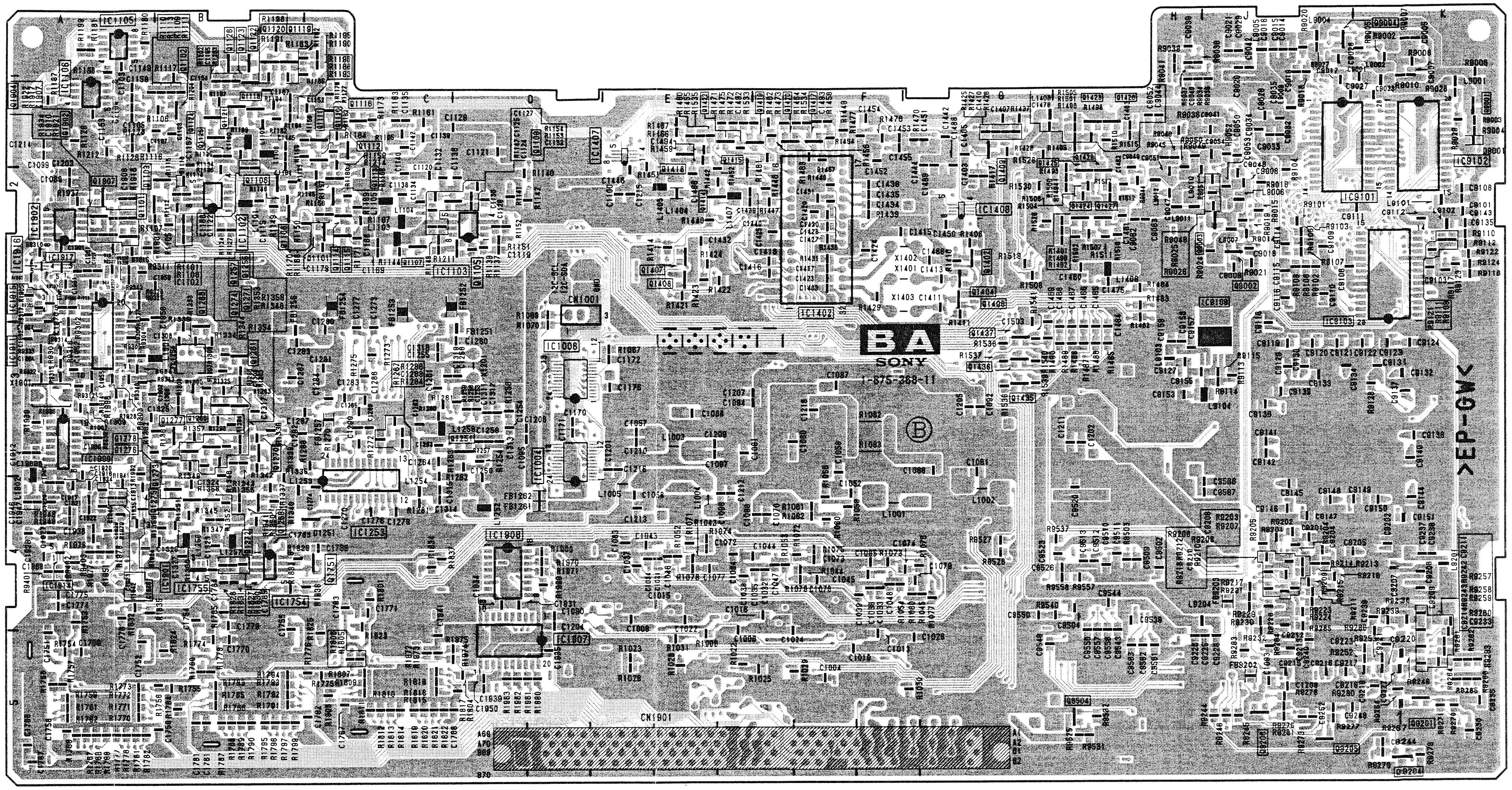
10-8

- Refer to page 10-8 for Printed Wiring Board


TB8501
VIDEO IN
BNC
S IN
C IN
Y IN
VIDEO OUT
S OUT
Y
C
S/SW1
S/SW2
B/SW1
B/SW2
B/SW3
VIDEO
D8505 RD10M
D8502 RD10M
D8503 RD10M
R8501 150 :RN-CP
R8502 150 :RN-CP
R8503 150 :RN-CP
R8504 150 :RN-CP
R8505 150 :RN-CP
R8506 150 :RN-CP
C8508 47 16V
C8509 47 16V
C8510 47 16V
R8523 22k :CHIP
R8524 22k :CHIP
R8525 22k :CHIP
R8526 47k :CHIP
R8527 47k :CHIP
R8528 47k :CHIP
R8532 47 :CHIP
R8533 47 :CHIP
R8534 47 :CHIP
Q8501 2SC2712 BUFF
Q8503 2SC2712 BUFF
Q8504 2SC2712 BUFF
R8529 470 :CHIP
R8530 470 :CHIP
R8531 470 :CHIP
3.1
3.0
2.4
SUB+5V
C8511 0.1 25V B:CHIP
C8512 0.1 25V B:CHIP
C8513 0.1 25V B:CHIP
R8508 47 :CHIP
R8507 47 :CHIP
R8509 10k :CHIP
D8501 1S2837
Q8502 DTC144EKA RELAY DRIVE
RY8501
4.3
1.3
R8510 47 :CHIP
R8512 100 :CHIP
R8511 100 :CHIP
R8514 100 :CHIP
R8513 100 :CHIP
C8503 47 16V
R8515 100k :CHIP
C8504 47 16V
R8516 100k :CHIP
C8501 47 16V
C8502 0.1 25V B:CHIP
C8505 47 16V
C8506 1 :BP
C8507 1 :BP
R8517 100k :CHIP
R8518 470k :CHIP
R8519 470k :CHIP
R8522 100 :CHIP
R8520 470k :CHIP
R8521 470k :CHIP
CN8501 12P :S-MICRO
1 Y1
2 GND
3 C1
4 GND
5 VIDEO
6 GND
7 AUDIO-L
8 GND
9 AUDIO-R
10 GND
11 DET-V
12 SUB5V
TO XA BOARD CN505
1 AUOUT-L
2 GND
3 AUOUT-R
4 GND
TO XA BOARD CN507
CN8502 4P :S-MICRO
J8502
J8503
L-V
R-V
QB
no mark:Video
(AV I/O)
B-SS1647<09.>-QB

	VPL-X2000U/X2000M	VPL-X2000E
C8501	47 16V	#
C8503	47 16V	#
C8504	47 16V	#
C8505	47 16V	#
C8506	1 :BP	#
C8507	1 :BP	#
C8508	47 16V	#
C8509	47 16V	#
C8510	47 16V	#
C8511	0.1 25V B:CHIP	#
C8512	0.1 25V B:CHIP	#
C8513	0.1 25V B:CHIP	#
D8501	1S2837	#
D8502	RD10M	#
D8503	RD10M	#
D8505	RD10M	#
J8502		#
Q8501	2SC2712	#
Q8502	DTC144EKA	#
Q8503	2SC2712	#
Q8504	2SC2712	#
R8501	150 :RN-CP	#
R8502	150 :RN-CP	#
R8503	150 :RN-CP	#
R8504	150 :RN-CP	#
R8505	150 :RN-CP	#
R8506	150 :RN-CP	#
R8507	47 :CHIP	#
R8508	47 :CHIP	#
R8509	10k :CHIP	#
R8510	47 :CHIP	#
R8511	100 :CHIP	#
R8512	100 :CHIP	#
R8522	100 :CHIP	#
R8523	22k :CHIP	#
R8524	22k :CHIP	#
R8525	22k :CHIP	#
R8526	47k :CHIP	#
R8527	47k :CHIP	#
R8528	47k :CHIP	#
R8529	470 :CHIP	#
R8530	470 :CHIP	#
R8531	470 :CHIP	#
R8532	47 :CHIP	#
R8533	47 :CHIP	#
R8534	47 :CHIP	#
RY8501		#
TB8501		#

: not use.

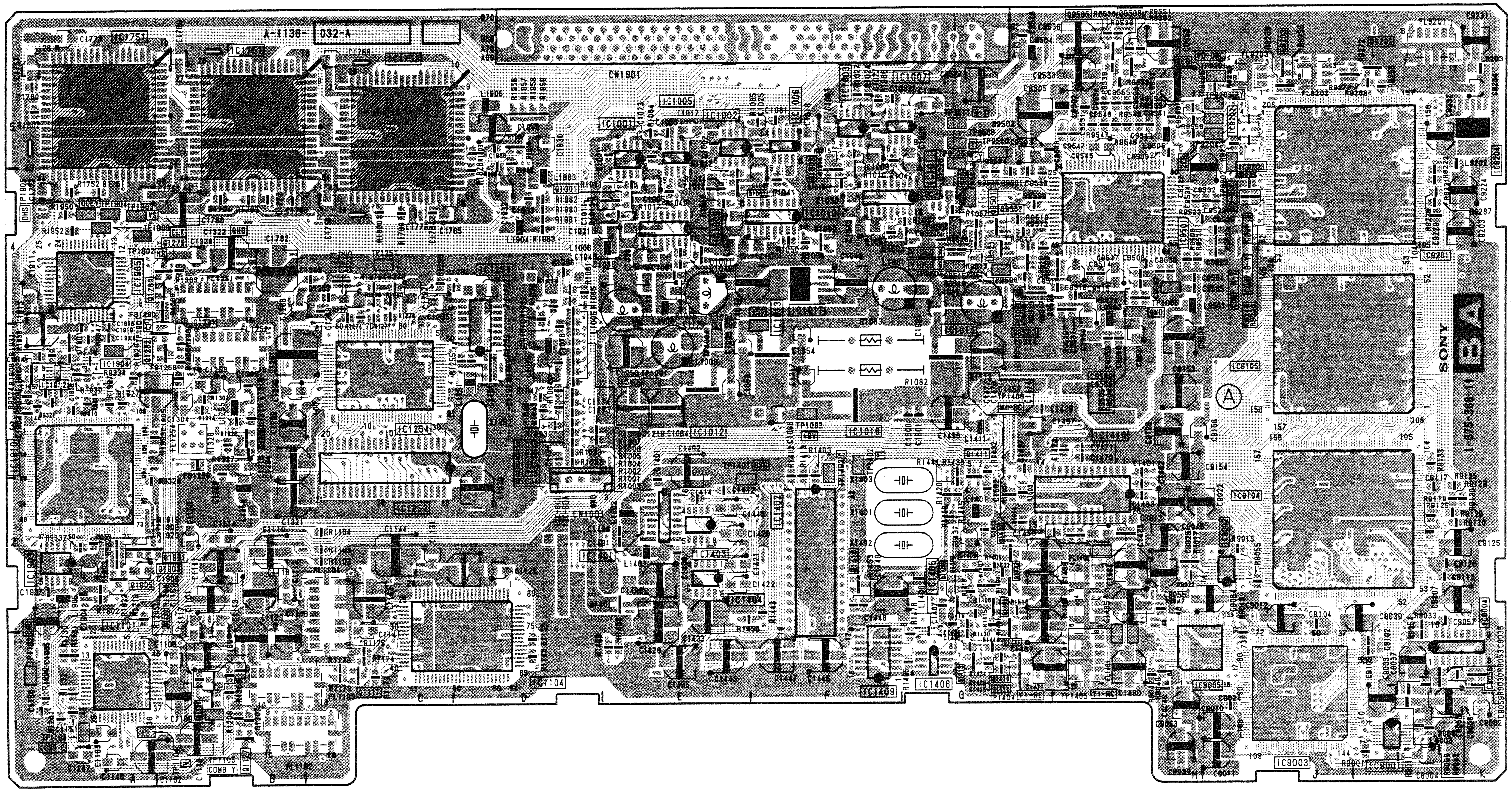


BA – B SIDE –

SUFFIX ; -11

—
BA
—
1-675-368-11

IC1004	D-3	IC9106	J-2	Q1126	B-1	Q1414	E-2	Q9201	K-5
IC1008	D-3			Q1251	D-3	Q1415	E-1	Q9204	K-5
IC1102	B-2	Q1101	A-2	Q1255	B-2	Q1417	F-1	Q9205	J-5
IC1103	D-2	Q1102	B-1	Q1257	B-2	Q1418	E-1	Q9206	J-5
IC1105	A-1	Q1103	A-2	Q1260	B-2	Q1419	F-1	Q9504	H-5
IC1106	A-1	Q1105	D-2	Q1261	B-3	Q1420	F-1		
IC1253	C-4	Q1106	B-2	Q1268	B-2	Q1422	E-1		
IC1407	D-1	Q1107	C-2	Q1269	B-3	Q1423	H-1		
IC1408	G-2	Q1108	B-2	Q1270	B-3	Q1424	H-1		
IC1754	B-4	Q1110	C-1	Q1271	B-2	Q1425	H-1		
IC1755	B-4	Q1111	C-1	Q1272	B-4	Q1426	H-1		
IC1901	B-4	Q1112	C-1	Q1273	A-3	Q1427	H-1		
IC1902	A-2	Q1113	C-2	Q1274	B-2	Q1428	H-1		
IC1906	D-4	Q1114	C-2	Q1275	A-5	Q1435	G-3		
IC1907	D-5	Q1115	C-2	Q1276	A-3	Q1436	G-3		
IC1909	A-3	Q1116	C-1	Q1277	B-3	Q1437	G-3		
IC1911	A-3	Q1118	B-1	Q1278	A-3	Q1751	C-4		
IC1914	A-4	Q1119	B-1	Q1280	B-3	Q1902	A-1		
IC1915	A-2	Q1120	B-1	Q1402	G-2	Q1904	A-1		
IC1916	A-2	Q1121	B-1	Q1404	G-2	Q1907	A-2		
IC1917	A-2	Q1122	B-1	Q1406	E-2	Q9001	K-1		
IC9101	K-2	Q1123	B-1	Q1407	E-2	Q9002	J-2		
IC9102	K-1	Q1124	B-1	Q1408	G-2	Q9003	H-2		
IC9103	J-3	Q1125	B-1	Q1409	G-2	Q9004	K-1		



BA – A SIDE –

SUFFIX ; -11

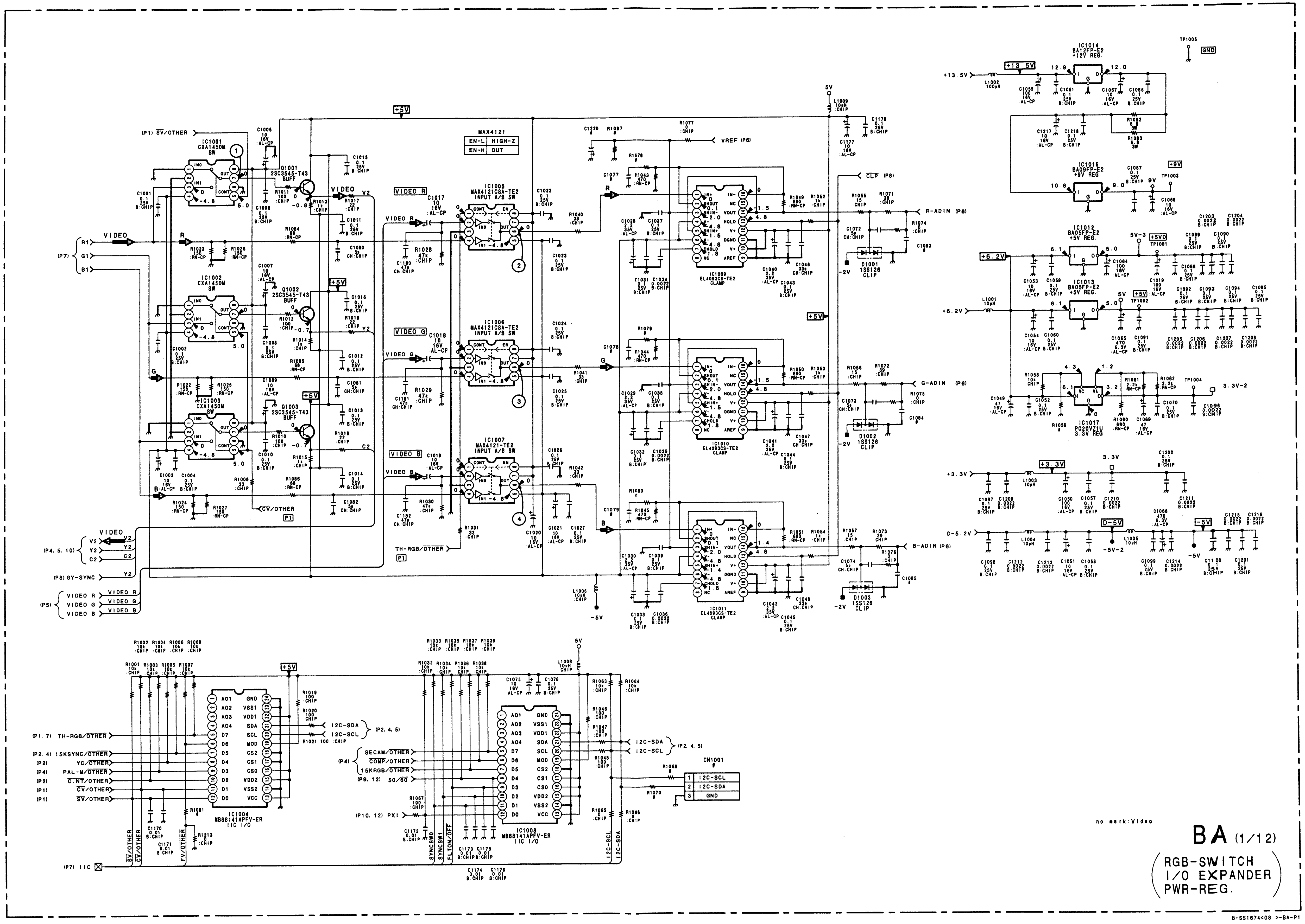
BA

1-675-368-11

IC1001	E-5
IC1002	E-5
IC1003	F-5
IC1005	E-5
IC1006	F-5
IC1007	G-5
IC1009	E-4
IC1010	F-4
IC1011	G-5
IC1012	E-3
IC1013	F-4
IC1014	G-3
IC1016	F-3
IC1017	F-4
IC1101	A-2
IC1104	D-1
IC1251	D-4
IC1252	C-2
IC1254	C-3
IC1401	E-2
IC1402	F-2
IC1403	E-2
IC1404	E-2
IC1405	G-2
IC1406	G-1
IC1409	F-1
IC1410	H-3
IC1751	A-5
IC1752	B-5
IC1753	C-5
IC1903	A-2
IC1904	A-3
IC1905	A-4
IC1910	A-3
IC1912	A-3
IC9001	K-1
IC9002	J-2
IC9003	J-1
IC9004	K-2
IC9005	J-1
IC9104	J-2
IC9105	J-3
IC9201	K-4
IC9202	J-5
IC9203	J-5
IC9204	K-5
IC9501	H-4
Q1001	D-4
Q1002	E-4
Q1003	E-5
Q1117	C-1
Q1127	B-1
Q1128	B-1
Q1129	B-2
Q1265	B-3
Q1279	B-4
Q1281	B-4
Q1282	A-3
Q1401	G-2
Q1403	G-2
Q1405	G-2
Q1410	G-1
Q1411	G-3
Q1412	G-1
Q1413	G-1
Q1416	F-2
Q1430	G-2
Q1431	G-1
Q1432	G-2
Q1901	B-2
Q1903	B-2
Q1905	A-2
Q9202	K-5
Q9203	J-5
Q9501	G-4
Q9502	G-4
Q9503	G-3
Q9505	H-5
Q9506	H-5
TP1001	E-3
TP1002	E-3
TP1003	E-3
TP1004	E-3
TP1005	H-4
TP1102	A-1
TP1104	B-1
TP1105	B-1
TP1106	A-1
TP1251	C-4
TP1401	E-3
TP1402	F-3
TP1403	F-3
TP1901	A-3
TP1902	A-4
TP1903	A-4
TP1904	A-4
TP1905	A-4
TP1906	A-4
TP9201	J-5
TP9202	J-4
TP9203	J-5
TP9204	J-5
TP9205	J-5
TP9504	G-4
TP9505	G-5
TP9506	G-4
TP9507	G-4
TP9508	G-4
TP9509	G-5
TP9510	G-5
TP9511	G-5

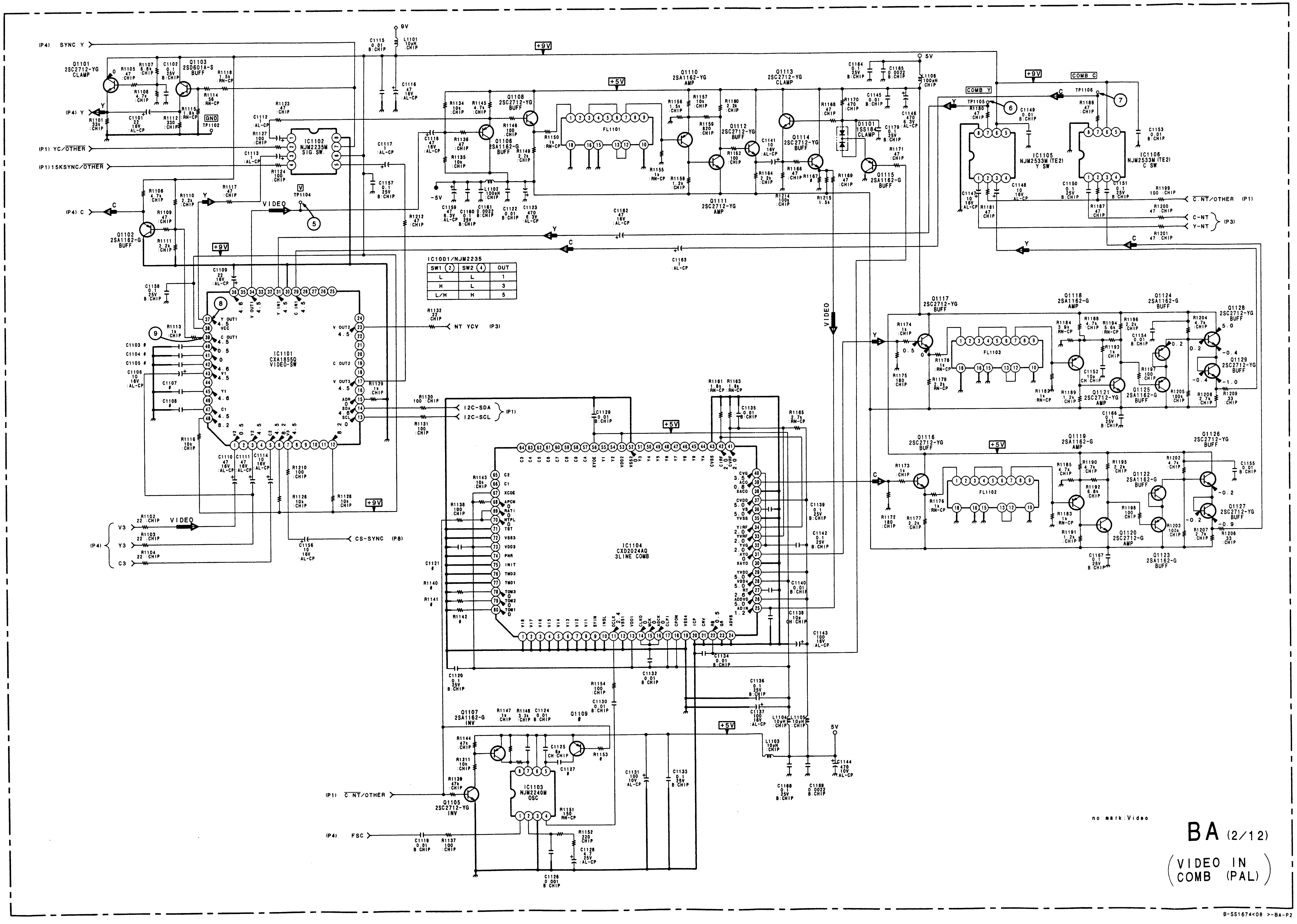
BA (1/12)

- Refer to page 10-10, 9-11 for Printed Wiring Board
- Refer to page 10-24 for Waveforms
- Refer to page 10-24, 10-25, 10-26 for IC Block Diagrams


+5V
IC1001 CXA1450M SW
IC1002 CXA1450M SW
IC1003 CXA1450M SW
Q1001 2SC3545-T43 BUFF
Q1002 2SC3545-T43 BUFF
Q1003 2SC3545-T43 BUFF
MAX4121
EN-L HIGH-Z
EN-H OUT
IC1005 MAX4121CSA-TE2 INPUT A/B SW
IC1006 MAX4121CSA-TE2 INPUT A/B SW
IC1007 MAX4121-TE2 INPUT A/B SW
VIDEO R
VIDEO G
VIDEO B
IC1009 EL4093CS-TE2 CLAMP
IC1010 EL4093CS-TE2 CLAMP
IC1011 EL4093CS-TE2 CLAMP
VREF (P6)
CLP (P8)
R-ADIN (P6)
G-ADIN (P6)
B-ADIN (P6)
D1001 1SS126 CLIP
D1002 1SS126 CLIP
D1003 1SS126 CLIP
(P1) SV/OTHER
(P7) R1 G1 B1
VIDEO
(P4, 5, 10) V2 Y2 C2
(P8) GY-SYNC
(P5) VIDEO R VIDEO G VIDEO B
CV/OTHER
TH-RGB/OTHER
IC1014 BA12FP-E2 +12V REG.
IC1016 BA09FP-E2 +9V REG.
IC1012 BA05FP-E2 +5V REG.
IC1013 BA05FP-E2 +5V REG.
IC1017 PQ20VZ1U 3.3V REG
+13.5V
+6.2V
+3.3V
D-5.2V
+9V
+5VD
3.3V-2
-5V
D-5V
TP1001 TP1002 TP1003 TP1004 TP1005
GND
IC1004 MB88141APFV-ER IIC I/O
IC1008 MB88141APFV-ER IIC I/O
AO1 AO2 AO3 AO4 D7 D6 D5 D4 D3 D2 D1 D0
GND VSS1 VDD1 SDA SCL MOD CS2 CS1 CS0 VDD2 VSS2 VCC
I2C-SDA
I2C-SCL
(P2, 4, 5)
(P1, 7) TH-RGB/OTHER
(P2, 4) 15KSYNC/OTHER
(P2) YC/OTHER
(P4) PAL-M/OTHER
(P2) C.NT/OTHER
(P1) CV/OTHER
(P1) SV/OTHER
(P4) SECAM/OTHER COMP/OTHER 15KRGB/OTHER
(P9, 12) 50/60
(P10, 12) PXI
(P7) IIC
SYNCSW0 SYNCSW1 FLTON/OFF
CN1001
1 I2C-SCL
2 I2C-SDA
3 GND
no mark:Video
BA (1/12)
RGB-SWITCH
I/O EXPANDER
PWR-REG.
B-SS1674<08.>-BA-P1
1 2 3 4 5
A B C D E F G H

10-12

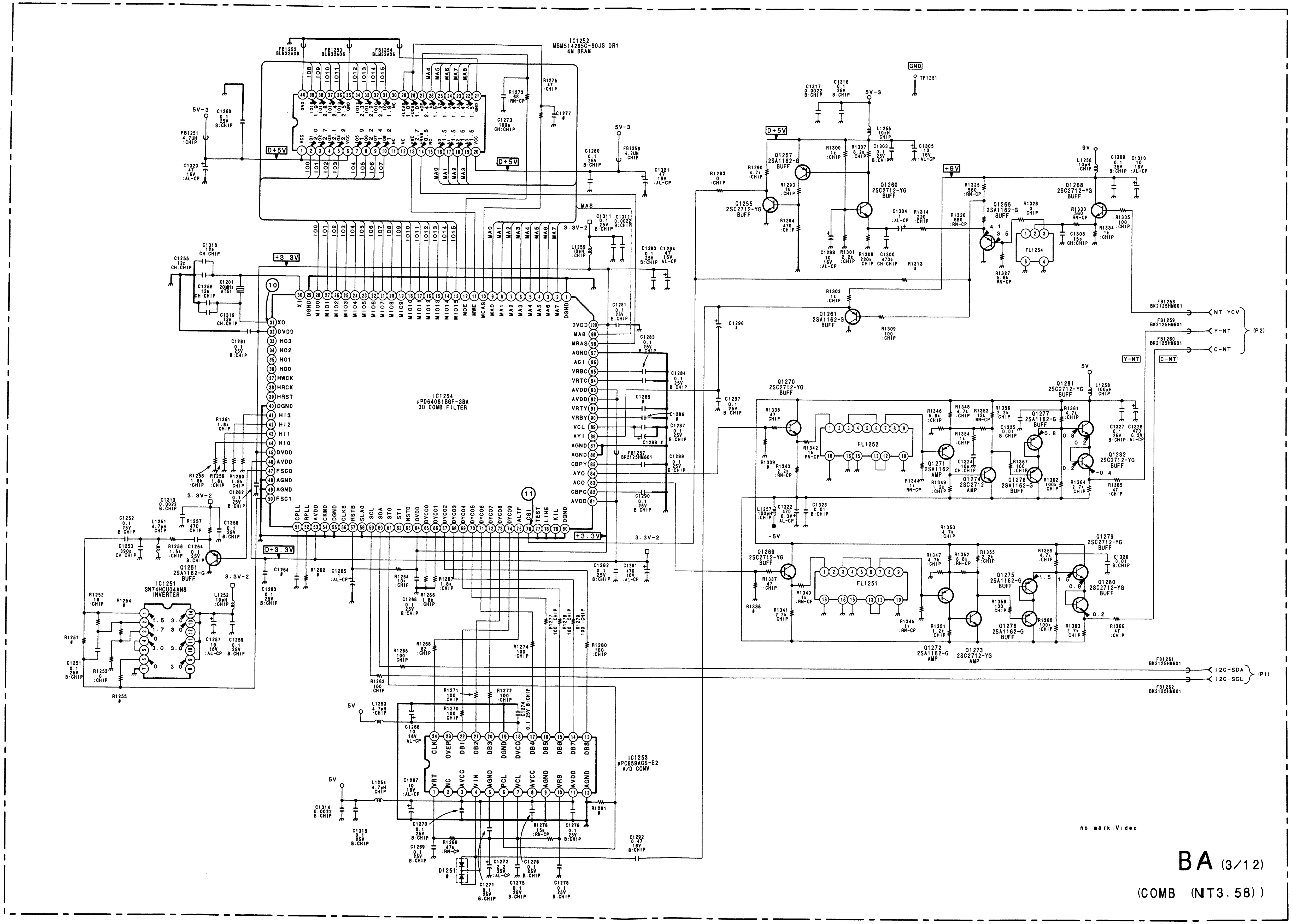
- Refer to page 10-10, 10-11 for Printed Wiring Board
- Refer to page 10-24 for Waveforms
- Refer to page 10-24, 10-25, 10-26 for IC Block Diagrams


(P4) SYNC Y
(P4) Y
(P1) YC/OTHER
(P1) 15KSYNC/OTHER
(P4) C
(P4) V3
Y3
C3
Q1101 2SC2712-YG CLAMP
Q1103 2SD601A-S BUFF
Q1102 2SA1162-G BUFF
IC1102 NJM2235M SIG.SW.
IC1101 CXA1855Q VIDEO-SW
IC1104 CXD2024AQ 3LINE COMB
IC1103 NJM2240M OSC
Q1107 2SA1162-G INV
Q1105 2SC2712-YG INV
Q1109
FL1101
FL1102
FL1103
Q1108 2SC2712-YG BUFF
Q1106 2SA1162-G BUFF
Q1110 2SA1162-YG AMP
Q1111 2SC2712-YG AMP
Q1112 2SC2712-YG BUFF
Q1113 2SC2712-YG CLAMP
Q1114 2SC2712-YG BUFF
Q1115 2SA1162-G BUFF
D1101 1SS184 CLAMP
IC1105 NJM2533M (TE2) Y SW
IC1106 NJM2533M (TE2) C SW
Q1117 2SC2712-YG BUFF
Q1118 2SA1162-G AMP
Q1124 2SA1162-G BUFF
Q1128 2SC2712-YG BUFF
Q1129 2SC2712-YG BUFF
Q1121 2SC2712-YG AMP
Q1125 2SA1162-G BUFF
Q1116 2SC2712-YG BUFF
Q1119 2SA1162-G AMP
Q1126 2SC2712-YG BUFF
Q1122 2SA1162-G BUFF
Q1127 2SC2712-YG BUFF
Q1120 2SC2712-G AMP
Q1123 2SA1162-G BUFF
9V
5V
+9V
+5V
-5V
GND
COMB Y
COMB C
TP1102
TP1104
TP1105
TP1106
VIDEO
NT YCV (P3)
I2C-SDA
I2C-SCL
(P1)
CS-SYNC (P8)
(P1) C-NT/OTHER
(P4) FSC
C-NT/OTHER (P1)
C-NT
Y-NT
(P3)
no mark:Video
BA (2/12)
(VIDEO IN COMB (PAL))
B-SS1674<08 >-BA-P2
1
2
3
4
5
A
B
C
D
E
F
G
H

IC1001/NJM2235

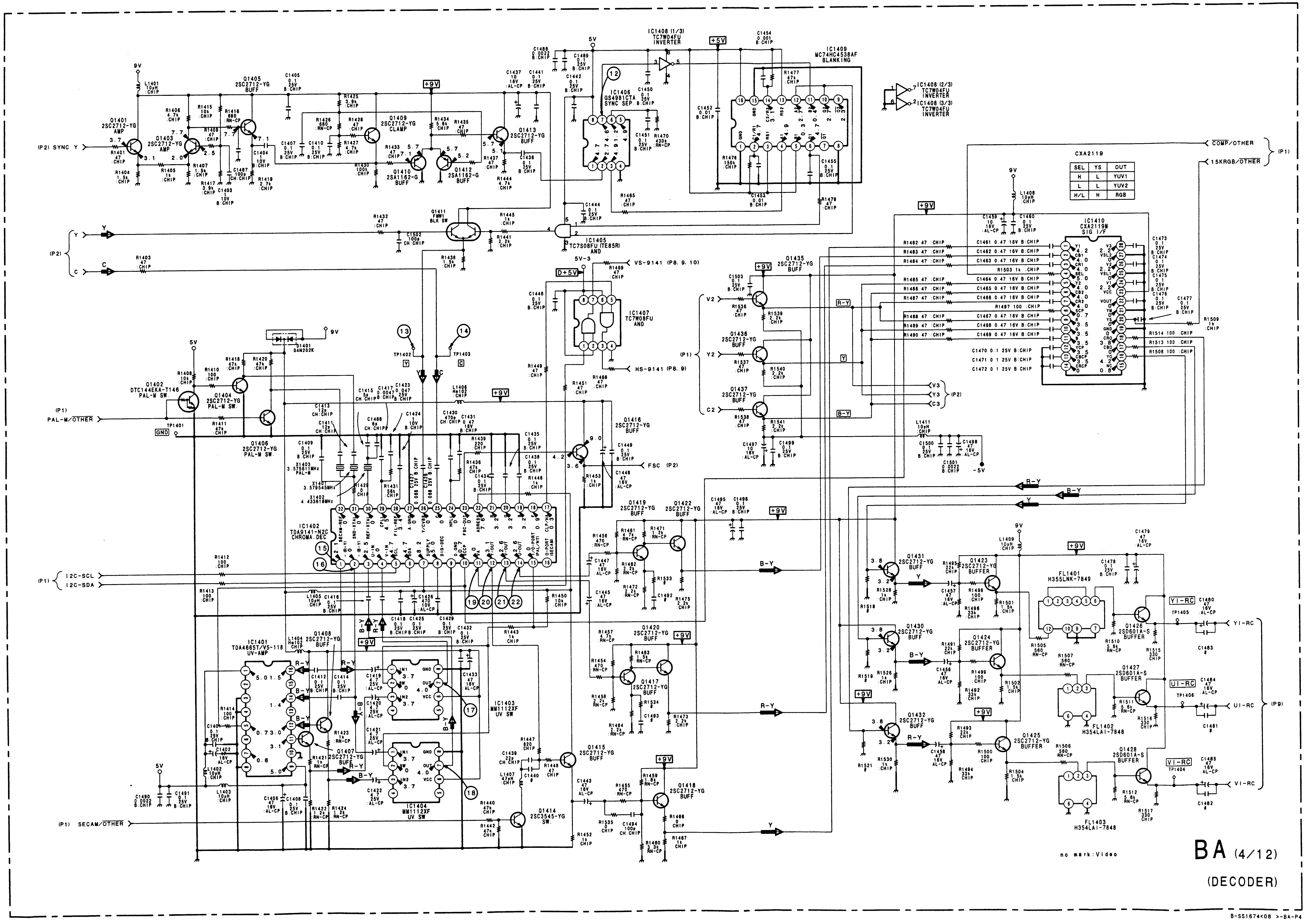
SW1 ②	SW2 ④	OUT
L	L	1
H	L	3
L/H	H	5

- Refer to page 10-10, 10-11 for Printed Wiring Board
- Refer to page 10-24 for Waveforms
- Refer to page 10-24, 10-25, 10-26 for IC Block Diagrams


IC1252
MSM514265C-60JS DR1
4M DRAM
IC1254
µPD64081BGF-3BA
3D COMB FILTER
IC1253
µPC659AGS-E2
A/D CONV.
IC1251
SN74HCU04ANS
INVERTER
X1201
20MHz
FL1251
FL1252
FL1254
Q1251 2SA1162-G BUFF
Q1255 2SC2712-YG BUFF
Q1257 2SA1162-G BUFF
Q1260 2SC2712-YG BUFF
Q1261 2SA1162-G BUFF
Q1265 2SA1162-G BUFF
Q1268 2SC2712-YG BUFF
Q1269 2SC2712-YG BUFF
Q1270 2SC2712-YG BUFF
Q1271 2SA1162 AMP
Q1272 2SA1162-G AMP
Q1273 2SC2712-YG AMP
Q1274 2SC2712 AMP
Q1275 2SA1162-G BUFF
Q1276 2SA1162-G BUFF
Q1277 2SA1162-G BUFF
Q1279 2SC2712-YG BUFF
Q1280 2SC2712-YG BUFF
Q1281 2SC2712-YG BUFF
Q1282 2SC2712-YG BUFF
D1251
D+5V
+3.3V
D+3.3V
+9V
5V-3
3.3V-2
9V
5V
-5V
GND
TP1251
Y-NT
C-NT
NT YCV
Y-NT
C-NT
(P2)
I2C-SDA
I2C-SCL
(P1)
FB1258 BK2125HM601
FB1259 BK2125HM601
FB1260 BK2125HM601
FB1261 BK2125HM601
FB1262 BK2125HM601
no mark:Video
BA (3/12)
(COMB (NT3.58))
1
2
3
4
5
A
B
C
D
E
F
G
H

B-SS1674<08:>-BA-P3

- Refer to page 10-10, 10-11 for Printed Wiring Board
- Refer to page 10-24 for Waveforms
- Refer to page 10-24, 10-25, 10-26 for IC Block Diagrams


IC1408 (1/3) TC7W04FU INVERTER
IC1409 MC74HC4538AF BLANKING
IC1408 (2/3) TC7W04FU INVERTER
IC1408 (3/3) TC7W04FU INVERTER
IC1406 GS4981CTA SYNC SEP.
Q1401 2SC2712-YG AMP
Q1403 2SC2712-YG AMP
Q1405 2SC2712-YG BUFF
Q1409 2SC2712-YG CLAMP
Q1410 2SA1162-G BUFF
Q1412 2SA1162-G BUFF
Q1413 2SC2712-YG BUFF
Q1411 FMW1 BLK SW
IC1405 TC7S08FU (TE85R) AND
IC1407 TC7W08FU AND
VS-9141 (P8, 9, 10)
HS-9141 (P8, 9)
(P2) SYNC Y
(P2) Y
(P2) C
Q1402 DTC144EKA-T146 PAL-M SW.
Q1404 2SC2712-YG PAL-M SW.
Q1406 2SC2712-YG PAL-M SW.
(P1) PAL-M/OTHER
D1401 DAN202K
IC1402 TDA9141-N2C CHROMA DEC
Q1416 2SC2712-YG BUFF
FSC (P2)
(P1) I2C-SCL
(P1) I2C-SDA
IC1401 TDA4665T/V5-118 UV-AMP
Q1408 2SC2712-YG BUFF
Q1407 2SC2712-YG BUFF
IC1403 MM1112XF UV SW
IC1404 MM1112XF UV SW
Q1414 2SC3545-YG SW.
Q1415 2SC2712-YG BUFF
(P1) SECAM/OTHER
Q1419 2SC2712-YG BUFF
Q1422 2SC2712-YG BUFF
Q1420 2SC2712-YG BUFF
Q1417 2SC2712-YG BUFF
Q1418 2SC2712-YG BUFF
Q1435 2SC2712-YG BUFF
Q1436 2SC2712-YG BUFF
Q1437 2SC2712-YG BUFF
(P1) V2, Y2, C2
V3, Y3, C3 (P2)
COMP/OTHER (P1)
15KRGB/OTHER
CXA2119
SEL | YS | OUT
H | L | YUV1
L | L | YUV2
H/L | H | RGB
IC1410 CXA2119M SIG I/F
Q1431 2SC2712-YG BUFF
Q1423 2SC2712-YG BUFFER
Q1430 2SC2712-YG BUFF
Q1424 2SC2712-YG BUFFER
Q1432 2SC2712-YG BUFF
Q1425 2SC2712-YG BUFFER
FL1401 H355LNK-7849
FL1402 H354LAI-7848
FL1403 H354LAI-7848
Q1426 2SD601A-S BUFFER
Q1427 2SD601A-S BUFFER
Q1428 2SD601A-S BUFFER
YI-RC
UI-RC
VI-RC
(P9)
B-Y
R-Y
Y
+9V
+5V
D+5V
-5V
no mark:Video
BA (4/12)
(DECODER)
B-SS1674<08>-BA-P4

1

2

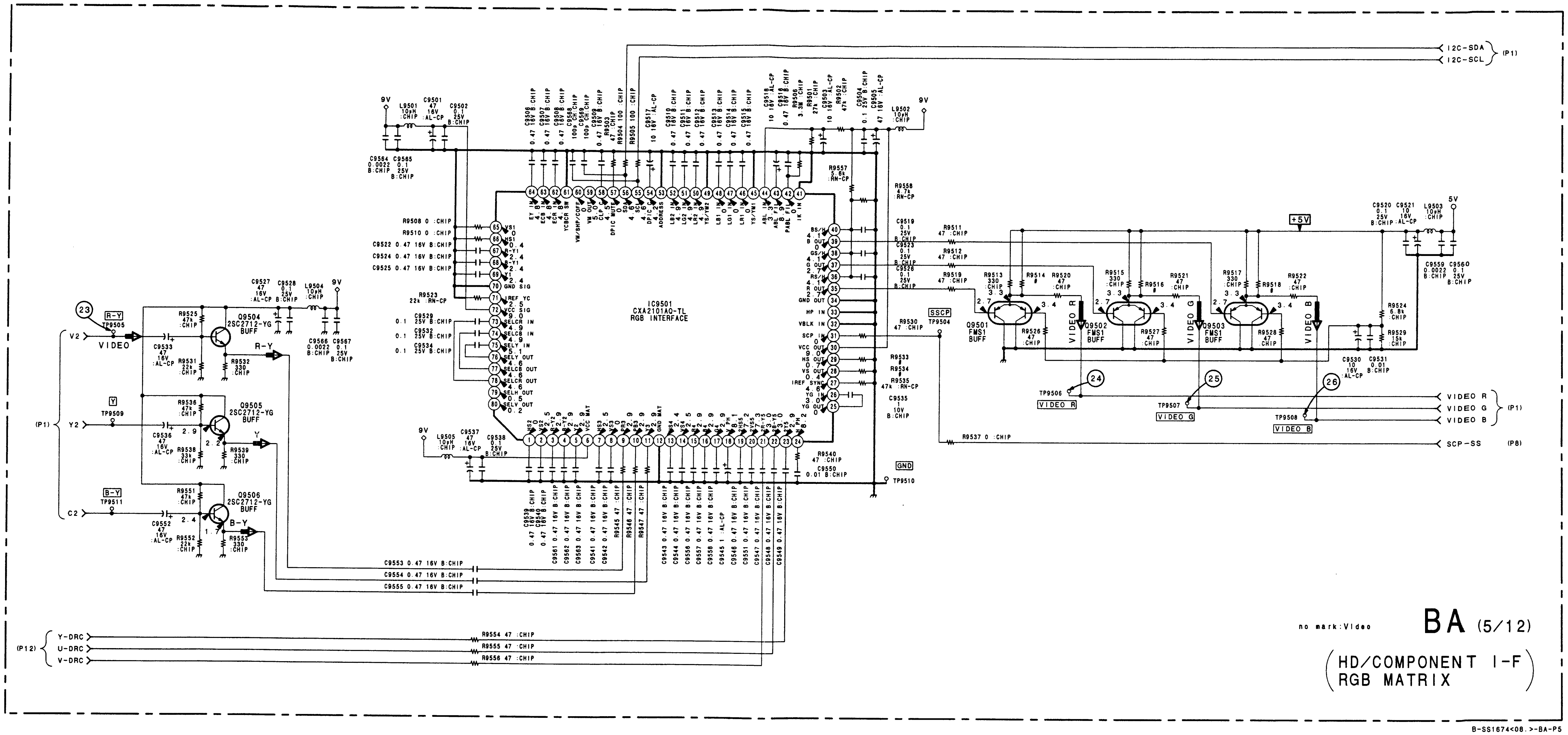
3

4

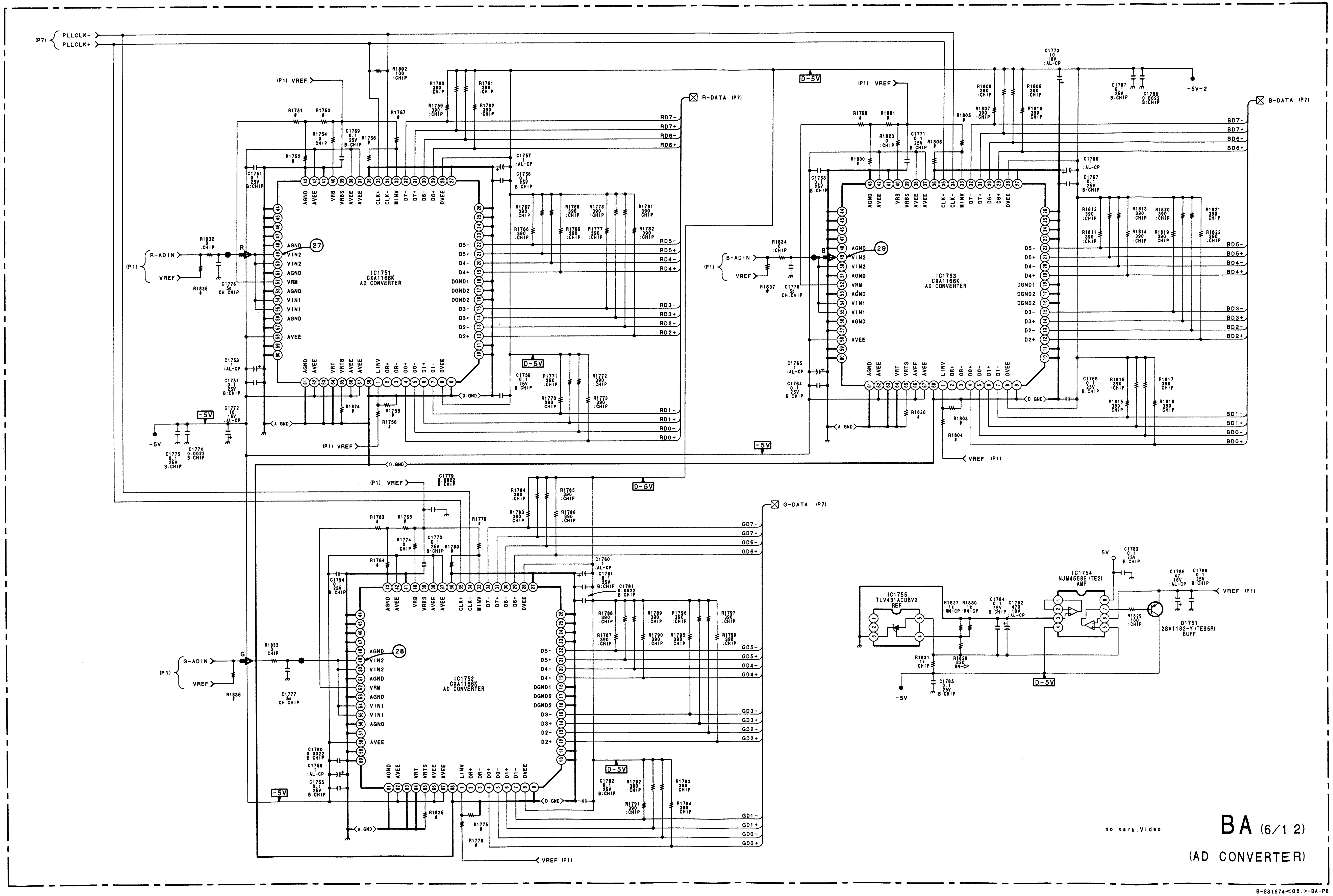
5

A | B | C | D | E | F | G | H

- Refer to page 10-10, 10-11 for Printed Wiring Board
- Refer to page 10-24 for Waveforms
- Refer to page 10-24, 10-25, 10-26 for IC Block Diagrams


IC9501
CXA2101AQ-TL
RGB INTERFACE
Q9504
2SC2712-YG
BUFF
Q9505
2SC2712-YG
BUFF
Q9506
2SC2712-YG
BUFF
Q9501
FMS1
BUFF
Q9502
FMS1
BUFF
Q9503
FMS1
BUFF
I2C-SDA
I2C-SCL
(P1)
VIDEO R
VIDEO G
VIDEO B
(P1)
SCP-SS
(P8)
Y-DRC
U-DRC
V-DRC
(P12)
V2
Y2
C2
(P1)
VIDEO
R-Y
Y
B-Y
TP9505
TP9509
TP9511
TP9504
TP9506
TP9507
TP9508
TP9510
SSCP
GND
+5V
9V
5V
23
24
25
26
no mark:Video
BA (5/12)
HD/COMPONENT I-F
RGB MATRIX
B-SS1674<08.>-BA-P5
1
2
3
4
5
A
B
C
D
E
F
G
H

- Refer to page 10-10, 10-11 for Printed Wiring Board
- Refer to page 10-24 for Waveforms
- Refer to page 10-24, 10-25, 10-26 for IC Block Diagrams


(P7) PLLCLK-
PLLCLK+
R-DATA (P7)
B-DATA (P7)
G-DATA (P7)
(P1) VREF
(P1) R-ADIN
(P1) B-ADIN
(P1) G-ADIN
VREF (P1)
IC1751 CXA1166K AD CONVERTER
IC1753 CXA1166K AD CONVERTER
IC1752 CXA1166K AD CONVERTER
IC1754 NJM4558E (TE2) AMP
IC1755 TLV431ACDBV2 REF
Q1751 2SA1182-Y (TE85R) BUFF
27
28
29
RD7- RD7+ RD6- RD6+ RD5- RD5+ RD4- RD4+ RD3- RD3+ RD2- RD2+ RD1- RD1+ RD0- RD0+
BD7- BD7+ BD6- BD6+ BD5- BD5+ BD4- BD4+ BD3- BD3+ BD2- BD2+ BD1- BD1+ BD0- BD0+
GD7- GD7+ GD6- GD6+ GD5- GD5+ GD4- GD4+ GD3- GD3+ GD2- GD2+ GD1- GD1+ GD0- GD0+
AGND AVEE VRB VRBS VRT VRTS VIN1 VIN2 VRM LINV MINV CLK+ CLK- DVEE DGND1 DGND2
D-5V
-5V
5V
-5V-2
A.GND
D.GND
1 2 3 4 5
A B C D E F G H

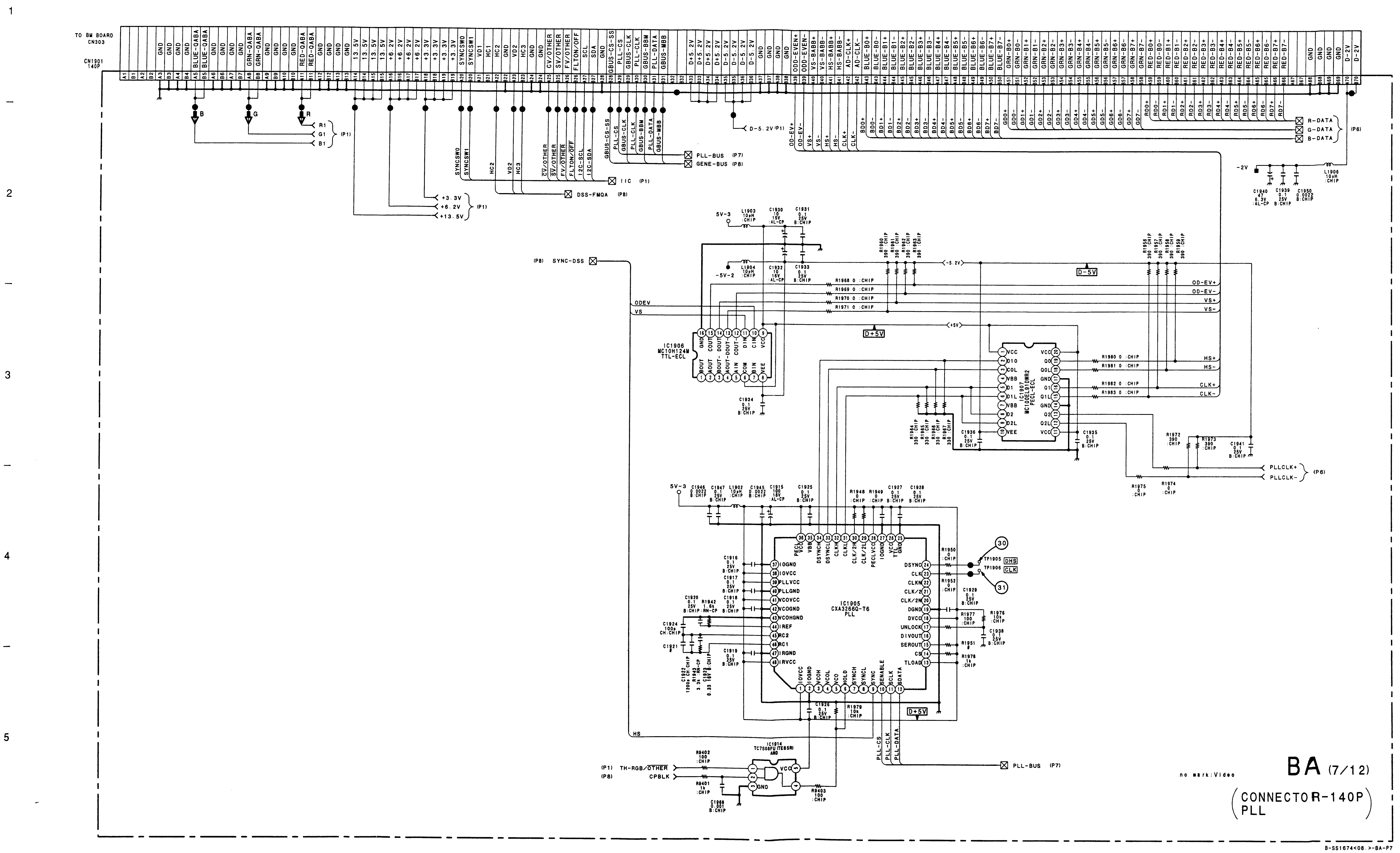
no mark : Video

BA (6/12)

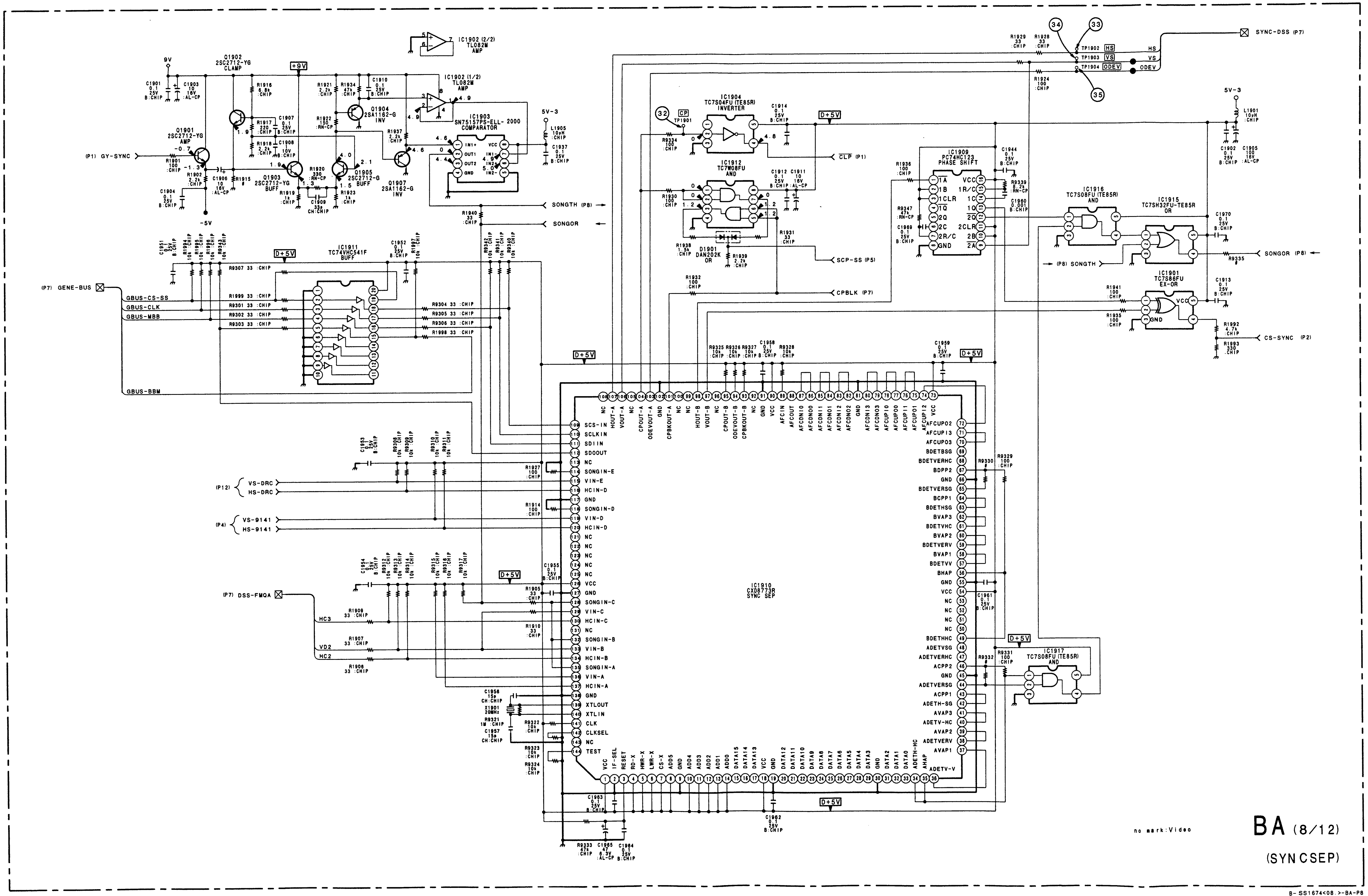
(AD CONVERTER)

B-SS1674<08>-BA-P6

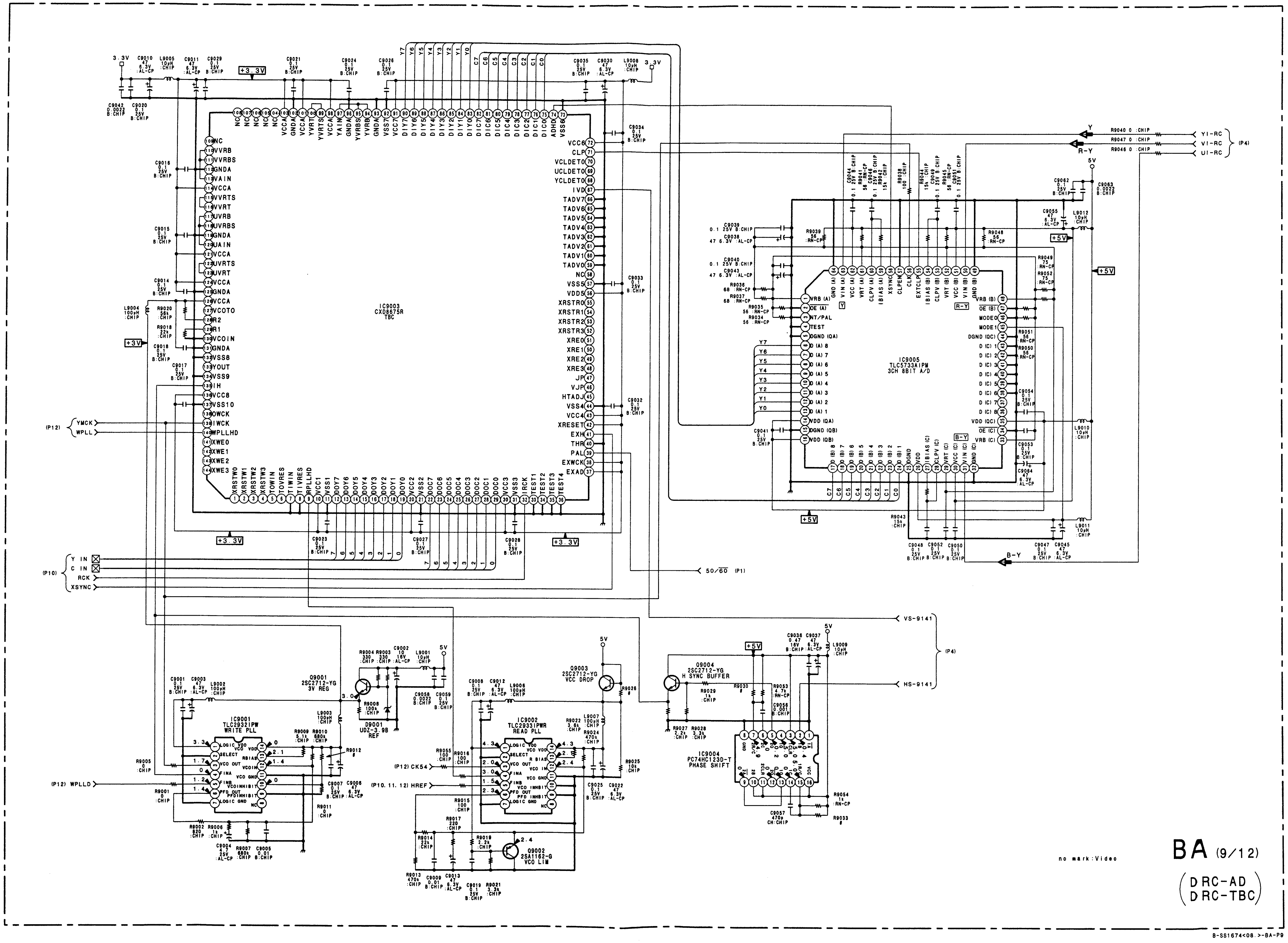
- Refer to page 10-10, 10-11 for Printed Wiring Board
- Refer to page 10-24 for Waveforms
- Refer to page 10-24, 10-25, 10-26 for IC Block Diagrams


TO BM BOARD CN303
CN1901 140P
GND
BLUE-QABA
GRN-QABA
RED-QABA
13.5V
+6.2V
+3.3V
SYNCSW0
SYNCSW1
VD1
HC1
HC2
VD2
HC3
CV/OTHER
SV/OTHER
FV/OTHER
FLTON/OFF
SCL
SDA
GBUS-CS-SS
PLL-CS
GBUS-CLK
PLL-CLK
GBUS-BBM
PLL-DATA
GBUS-MBB
D+5.2V
D-5.2V
ODD-EVEN+
ODD-EVEN-
VS-BABB+
VS-BABB-
HS-BABB+
HS-BABB-
AD-CLK+
AD-CLK-
D-2V
R1
G1 (P1)
B1
PLL-BUS (P7)
GENE-BUS (P8)
IIC (P1)
DSS-FMQA (P8)
+3.3V
+6.2V (P1)
+13.5V
D-5.2V (P1)
R-DATA
G-DATA (P6)
B-DATA
(P8) SYNC-DSS
ODEV
VS
5V-3
-5V-2
D-5V
D+5V
IC1906 MC10H124M TTL-ECL
IC1907 MC100EL91DWR2 PECL-ECL
OD-EV+
OD-EV-
VS+
VS-
HS+
HS-
CLK+
CLK-
PLLCLK+
PLLCLK- (P6)
IC1905 CXA3266Q-T6 PLL
TP1905 DHS
TP1906 CLK
30
31
HS
IC1914 TC7S08FU(TE85R) AND
(P1) TH-RGB/OTHER
(P8) CPBLK
PLL-BUS (P7)
no mark:Video
BA (7/12)
(CONNECTOR-140P PLL)
B-SS1674<08.>-BA-P7
1
2
3
4
5
A
B
C
D
E
F
G
H

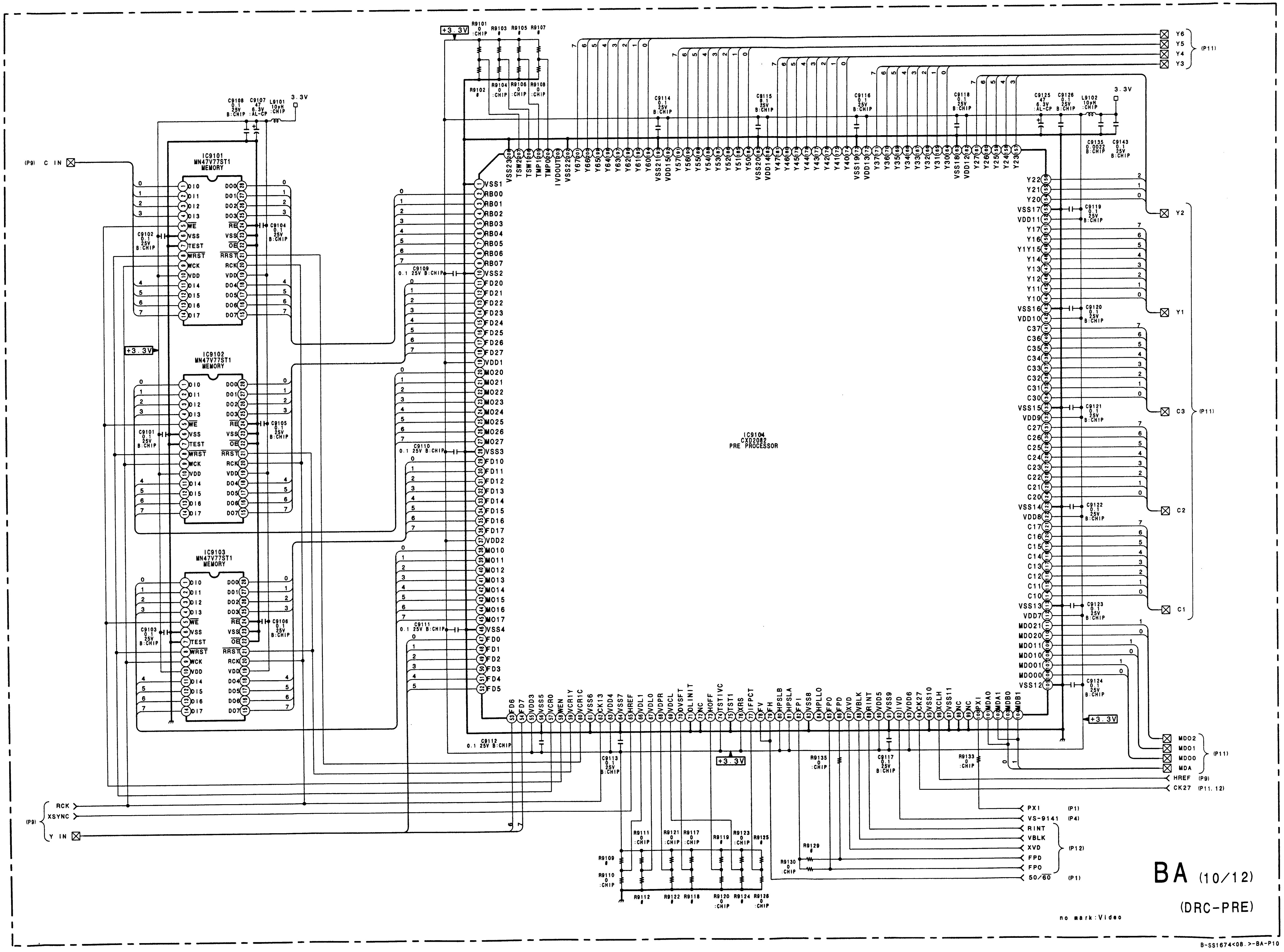
- Refer to page 10-10, 10-11 for Printed Wiring Board
- Refer to page 10-24 for Waveforms
- Refer to page 10-24, 10-25, 10-26 for IC Block Diagrams


IC1902 (2/2) TL082M AMP
IC1902 (1/2) TL082M AMP
Q1902 2SC2712-YG CLAMP
Q1901 2SC2712-YG AMP
Q1903 2SC2712-YG BUFF
Q1904 2SA1162-G INV
Q1905 2SC2712-G BUFF
Q1907 2SA1162-G INV
IC1903 SN75157PS-ELL-2000 COMPARATOR
(P1) GY-SYNC
9V
-5V
+9V
5V-3
SONGTH (P8)
SONGOR
IC1911 TC74VHC541F BUFF
(P7) GENE-BUS
GBUS-CS-SS
GBUS-CLK
GBUS-MBB
GBUS-BBM
D+5V
IC1904 TC7S04FU (TE85R) INVERTER
CP TP1901
IC1912 TC7W08FU AND
D1901 DAN202K OR
CLP (P1)
SCP-SS (P5)
CPBLK (P7)
IC1909 PC74HC123 PHASE SHIFT
IC1916 TC7S08FU (TE85R) AND
IC1915 TC7SH32FU-TE85R OR
IC1901 TC7S86FU EX-OR
(P8) SONGTH
SONGOR (P8)
CS-SYNC (P2)
SYNC-DSS (P7)
TP1902 HS
TP1903 VS
TP1904 ODEV
HS
VS
ODEV
(P12) VS-DRC HS-DRC
(P4) VS-9141 HS-9141
(P7) DSS-FMQA
HC3
VD2
HC2
IC1910 CXD8773R SYNC SEP
IC1917 TC7S08FU (TE85R) AND
X1901 20MHz
no mark:Video
BA (8/12)
(SYNCSEP)
B- SS1674<08 >-BA-P8
1
2
3
4
5
A
B
C
D
E
F
G
H

- Refer to page 10-10, 10-11 for Printed Wiring Board
- Refer to page 10-24 for Waveforms
- Refer to page 10-24, 10-25, 10-26 for IC Block Diagrams


IC9003
CXD8675R
TBC
IC9005
TLC5733AIPM
3CH 8BIT A/D
IC9001
TLC2932IPW
WRITE PLL
IC9002
TLC2933IPWR
READ PLL
IC9004
PC74HC123D-T
PHASE SHIFT
Q9001
2SC2712-YG
3V REG
D9001
UDZ-3.9B
REF
Q9003
2SC2712-YG
VCC DROP
Q9004
2SC2712-YG
H SYNC BUFFER
Q9002
2SA1162-G
VCO LIM
+3.3V
+5V
3.3V
5V
(P12) YMCK
WPLL
(P10) Y IN
C IN
RCK
XSYNC
(P12) WPLLD
(P12) CK54
(P10, 11, 12) HREF
50/60 (P1)
VS-9141
HS-9141
(P4)
YI-RC
VI-RC
UI-RC
Y
R-Y
B-Y
no mark:Video
BA (9/12)
(DRC-AD
DRC-TBC)
8-SS1674<08>-BA-P9

- Refer to page 10-10, 10-11 for Printed Wiring Board
- Refer to page 10-24 for Waveforms
- Refer to page 10-24, 10-25, 10-26 for IC Block Diagrams

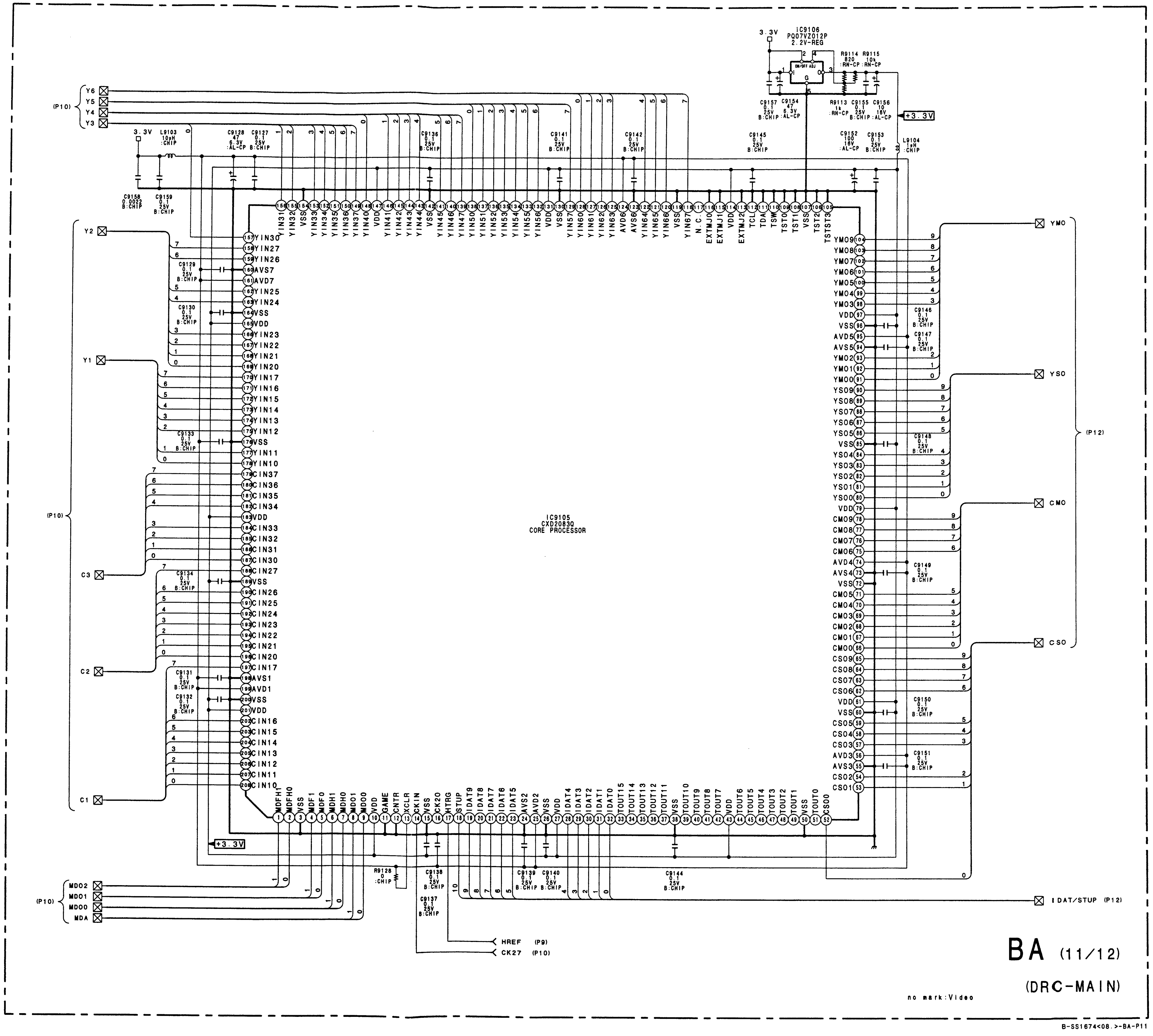

IC9101
MN47V77ST1
MEMORY
IC9102
MN47V77ST1
MEMORY
IC9103
MN47V77ST1
MEMORY
IC9104
CXD2082
PRE PROCESSOR
+3.3V
3.3V
L9101 10μH :CHIP
L9102 10μH :CHIP
(P9) C IN
(P9) RCK
XSYNC
Y IN
Y6
Y5
Y4
Y3
(P11)
Y2
Y1
C3
(P11)
C2
C1
MDO2
MDO1
MDO0
MDA
(P11)
HREF (P9)
CK27 (P11, 12)
PXI (P1)
VS-9141 (P4)
RINT
VBLK
XVD
FPD
FPO
(P12)
50/60 (P1)
BA (10/12)
(DRC-PRE)
no mark:Video
B-SS1674<08.>-BA-P10

1
2
3
4
5

A B C D E F G H

BA (11/12)

- Refer to page 10-10, 10-11 for Printed Wiring Board
- Refer to page 10-24 for Waveforms
- Refer to page 10-24, 10-25, 10-26 for IC Block Diagrams

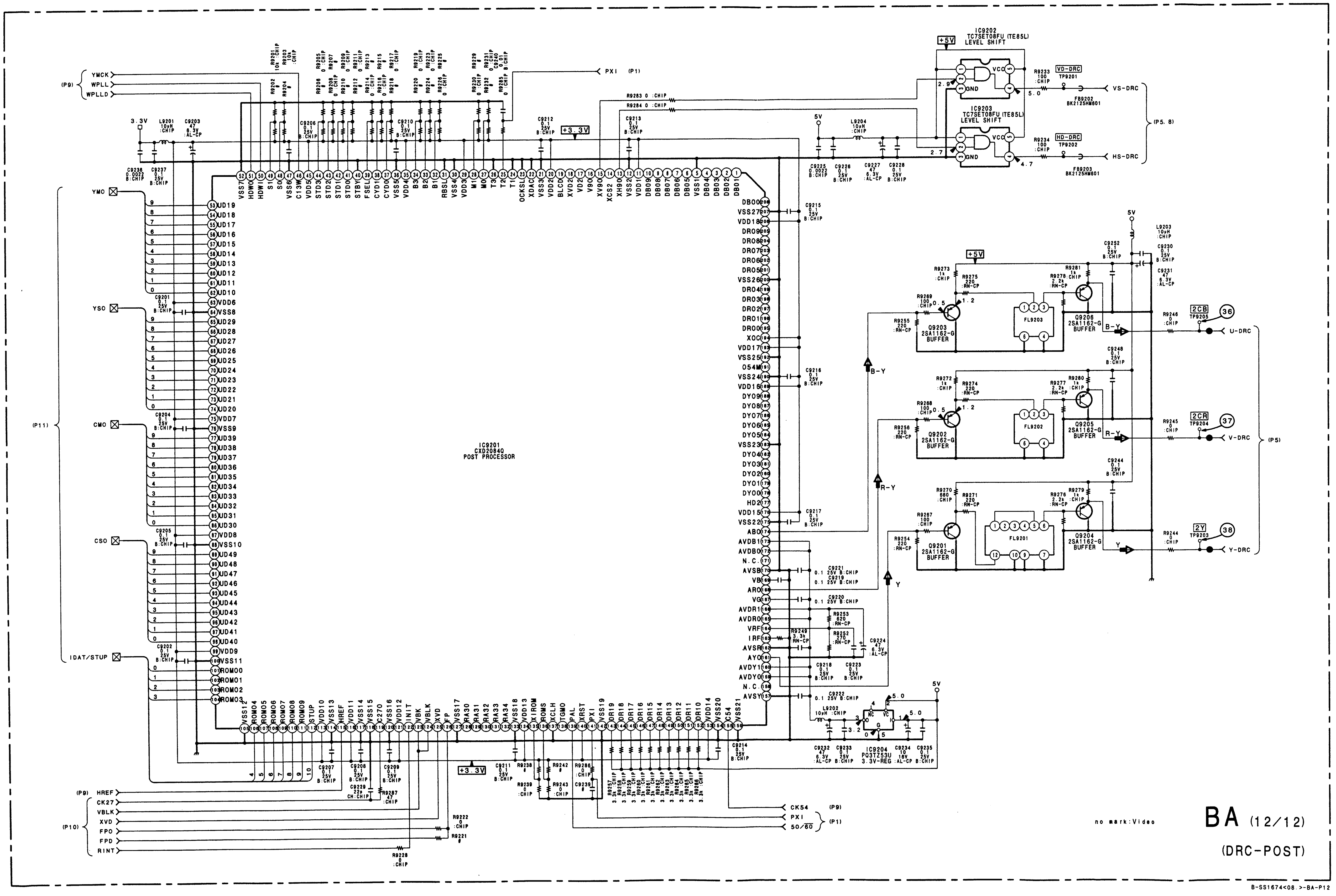

1
2
3
4
5
A
B
C
D
E
F
G
H
IC9106
PQ07VZ012P
2.2V-REG
ON/OFF ADJ
3.3V
+3.3V
R9114 820 :RN-CP
R9115 10k :RN-CP
R9113 1k :RN-CP
C9157 0.1 25V B:CHIP
C9154 47 6.3V :AL-CP
C9155 0.1 25V B:CHIP
C9156 10 16V :AL-CP
C9145 0.1 25V B:CHIP
C9152 100 16V :AL-CP
C9153 0.1 25V B:CHIP
L9104 1μH :CHIP
L9103 10μH :CHIP
C9158 0.0022 B:CHIP
C9159 0.1 25V B:CHIP
C9128 47 6.3V :AL-CP
C9127 0.1 25V B:CHIP
C9136 0.1 25V B:CHIP
C9141 0.1 25V B:CHIP
C9142 0.1 25V B:CHIP
C9129 0.1 25V B:CHIP
C9130 0.1 25V B:CHIP
C9133 0.1 25V B:CHIP
C9134 0.1 25V B:CHIP
C9131 0.1 25V B:CHIP
C9132 0.1 25V B:CHIP
C9146 0.1 25V B:CHIP
C9147 0.1 25V B:CHIP
C9148 0.1 25V B:CHIP
C9149 0.1 25V B:CHIP
C9150 0.1 25V B:CHIP
C9151 0.1 25V B:CHIP
C9138 0.1 25V B:CHIP
C9137 0.1 25V B:CHIP
C9139 0.1 25V B:CHIP
C9140 0.1 25V B:CHIP
C9144 0.1 25V B:CHIP
R9128 0 :CHIP
IC9105
CXD2083Q
CORE PROCESSOR
(P10)
Y6
Y5
Y4
Y3
Y2
Y1
C3
C2
C1
MDO2
MDO1
MDO0
MDA
YMO
YSO
CMO
CSO
(P12)
IDAT/STUP (P12)
HREF (P9)
CK27 (P10)
YIN31 YIN32 VSS YIN33 YIN34 YIN35 YIN36 YIN37 YIN40 VDD YIN41 YIN42 YIN43 YIN44 VSS YIN45 YIN46 YIN47 YIN50 YIN51 YIN52 YIN53 YIN54 YIN55 YIN56 VDD VSS YIN57 YIN60 YIN61 YIN62 YIN63 AVD6 AVS6 YIN64 YIN65 YIN66 YIN67 VSS N.C EXTMJ0 EXTMJ1 VDD EXTMJ2 TCL TDA TSW TST0 TST1 VSS TST2 TSTST3
YIN30 YIN27 YIN26 AVS7 AVD7 YIN25 YIN24 VSS VDD YIN23 YIN22 YIN21 YIN20 YIN17 YIN16 YIN15 YIN14 YIN13 YIN12 VSS YIN11 YIN10 CIN37 CIN36 CIN35 CIN34 VDD CIN33 CIN32 CIN31 CIN30 CIN27 VSS CIN26 CIN25 CIN24 CIN23 CIN22 CIN21 CIN20 CIN17 AVS1 AVD1 VSS VDD CIN16 CIN15 CIN14 CIN13 CIN12 CIN11 CIN10
MDFH1 MDFH0 VSS MDF1 MDF0 MDH1 MDH0 MDO1 MDO0 VDD GAME CNTR XCLR CKIN VSS CK20 HTRG STUP IDAT9 IDAT8 IDAT7 IDAT6 IDAT5 AVS2 AVD2 VSS VDD IDAT4 IDAT3 IDAT2 IDAT1 IDAT0 TOUT15 TOUT14 TOUT13 TOUT12 TOUT11 VSS TOUT10 TOUT9 TOUT8 TOUT7 VDD TOUT6 TOUT5 TOUT4 TOUT3 TOUT2 TOUT1 VSS TOUT0 CS00
YMO9 YMO8 YMO7 YMO6 YMO5 YMO4 YMO3 VDD VSS AVD5 AVS5 YMO2 YMO1 YMO0 YSO9 YSO8 YSO7 YSO6 YSO5 VSS YSO4 YSO3 YSO2 YSO1 YSO0 VDD CMO9 CMO8 CMO7 CMO6 AVD4 AVS4 VSS CMO5 CMO4 CMO3 CMO2 CMO1 CMO0 CSO9 CSO8 CSO7 CSO6 VDD VSS CSO5 CSO4 CSO3 AVD3 AVS3 CSO2 CSO1
BA (11/12)
(DRC-MAIN)
no mark:Video

B-SS1674<08.>-BA-P11

10-22

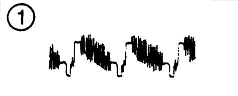
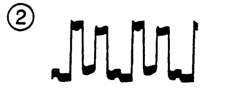
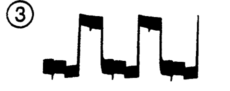
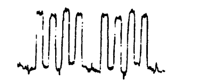
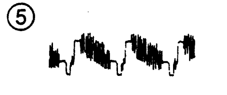
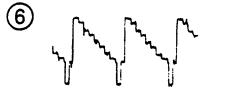
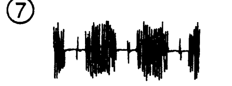
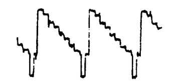
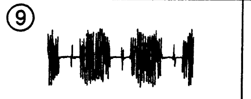
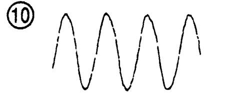
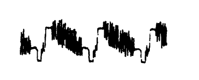
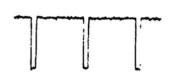
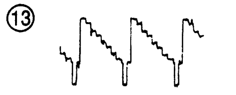
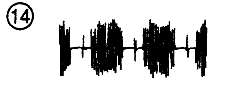
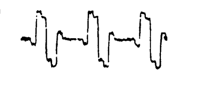
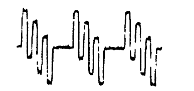
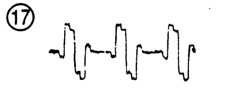
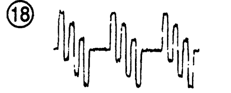
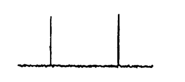
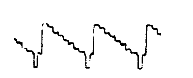
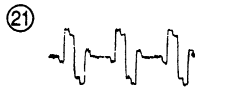
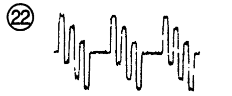
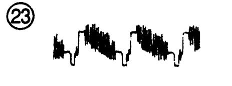
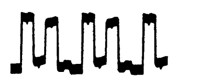
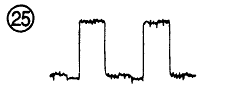
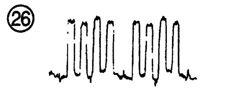
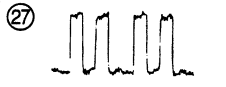
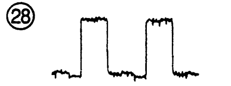
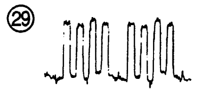
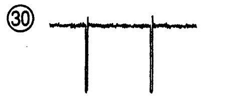
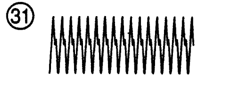
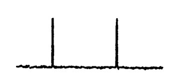
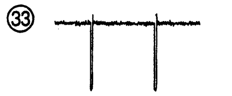
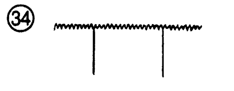
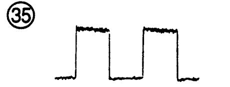
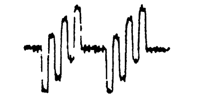
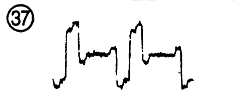
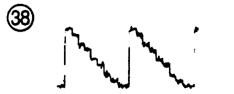
BA (12/12)

- Refer to page 10-10, 10-11 for Printed Wiring Board
- Refer to page 10-24 for Waveforms
- Refer to page 10-24, 10-25, 10-26 for IC Block Diagrams


IC9201
CXD2084Q
POST PROCESSOR
IC9202
TC7SET08FU (TE85L)
LEVEL SHIFT
IC9203
TC7SET08FU (TE85L)
LEVEL SHIFT
IC9204
PQ3TZ53U
3.3V-REG
Q9201 2SA1162-G BUFFER
Q9202 2SA1162-G BUFFER
Q9203 2SA1162-G BUFFER
Q9204 2SA1162-G BUFFER
Q9205 2SA1162-G BUFFER
Q9206 2SA1162-G BUFFER
FL9201
FL9202
FL9203
+5V
+3.3V
3.3V
5V
YMCK
WPLL
WPLLD
(P9)
PX1
(P1)
VS-DRC
HS-DRC
(P5, 8)
VD-DRC
HD-DRC
TP9201
TP9202
U-DRC
V-DRC
Y-DRC
(P5)
2CB
2CR
2Y
TP9203
TP9204
TP9205
36
37
38
B-Y
R-Y
Y
YMO
YSO
CMO
CSO
IDAT/STUP
(P11)
HREF
CK27
VBLK
XVD
FPO
FPD
RINT
(P10)
CK54
PX1
50/60
no mark:Video
BA (12/12)
(DRC-POST)
B-SS1674<08>-BA-P12

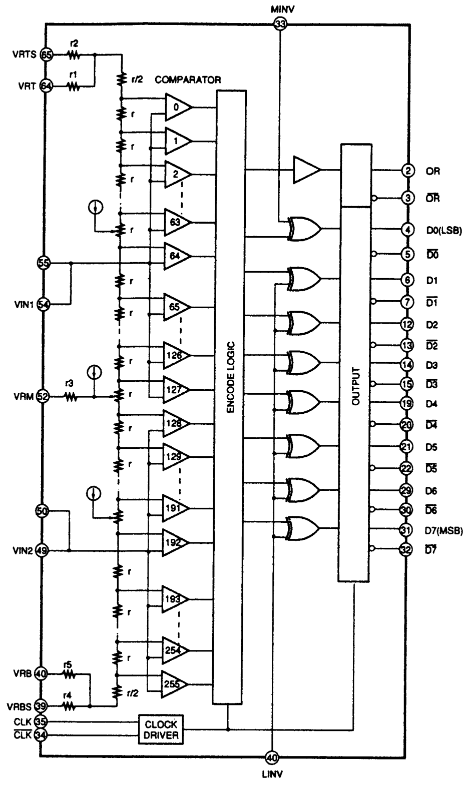
10-23

BA Board Waveforms

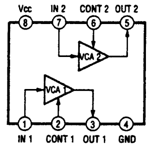
①  1Vp-p (H) IC1001 ⑦ R1 (V2)	②  0.6Vp-p (H) IC1005 ⑥ (VIDEO R)	③  0.6Vp-p (H) IC1006 ⑥ (VIDEO G)	④  0.6Vp-p (H) IC1007 ⑥ (VIDEO B)
⑤  1Vp-p (H) TP1104 V (VIDEO OUT1)	⑥  1.6Vp-p (H) TP1105 COMB Y	⑦  0.6Vp-p (H) TP1106 COMB C	⑧  1.6Vp-p (H) IC1101 ㊲ (Y OUT1)
⑨  0.6Vp-p (H) IC1101 ㊴ (C OUT1)	⑩  3.8Vp-p (V) IC1254 ㉛ (XO=20MHz)	⑪  1.8Vp-p (H) IC1254 ⑯ (CSI)	⑫  5Vp-p (H) IC1406 ⑦ (SYNC Y)
⑬  0.8Vp-p TP1402 Y	⑭  0.3Vp-p (H) TP1403 C	⑮  0.55Vp-p (H) IC1402 ① (R-Y)	⑯  0.7Vp-p (H) IC1402 ② (B-Y)
⑰  1.2Vp-p (H) IC1403 ⑦ (R-Y OUT)	⑱  1.5Vp-p (H) IC1404 ⑦ (B-Y)	⑲  4.6Vp-p (H) IC1402 ⑪ (VA)	⑳  1.3Vp-p (H) IC1402 ⑫ (Y OUT)
㉑  1.1Vp-p (H) IC1402 ⑬ (V OUT)	㉒  1.3Vp-p (H) IC1402 ⑭ (U OUT)	㉓  1Vp-p (H) TP9505 R-Y	㉔  0.6Vp-p (H) TP9506 VIDEO R
㉕  0.6Vp-p (H) TP9507 VIDEO G	㉖  0.6Vp-p (H) TP9508 VIDEO B	㉗  1.5Vp-p (H) IC1751 ㊾ (R-AD IN)	㉘  1.5Vp-p (H) IC1752 ㊾ (G-AD IN)
㉙  1.5Vp-p (H) IC1753 ㊾ (B-AD IN)	㉚  2.9Vp-p (H) TP1905 DHS	㉛  1.4Vp-p (H) TP1906 CLK	㉜  5.0Vp-p (H) TP1901 CP
㉝  5Vp-p (H) TP1902 HS	㉞  5Vp-p (H) TP1903 VS	㉟  5Vp-p (H) TP1904 ODE V	㊱  0.6Vp-p (H) TP9205 2CB
㊲  0.5Vp-p (H) TP9204 2CR	㊳  0.6Vp-p (H) TP9203 2Y		

BA Board IC Block Diagrams

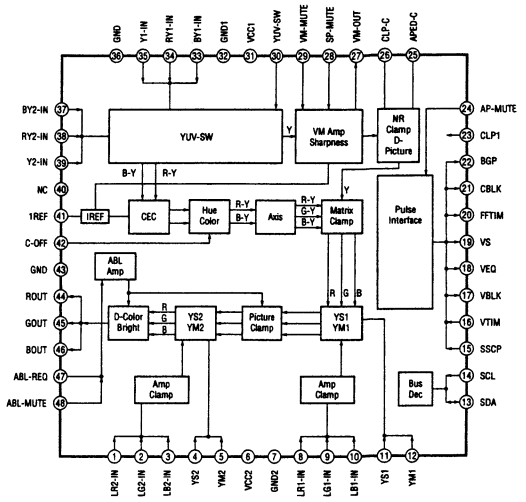
CXA1166K (IC1751 – 1753)


MINV
VRTS
VRT
COMPARATOR
VIN1
VRM
VIN2
VRB
VRBS
CLK
CLK
CLOCK DRIVER
ENCODE LOGIC
OUTPUT
OR
OR
D0(LSB)
D1
D2
D3
D4
D5
D6
D7(MSB)
LINV

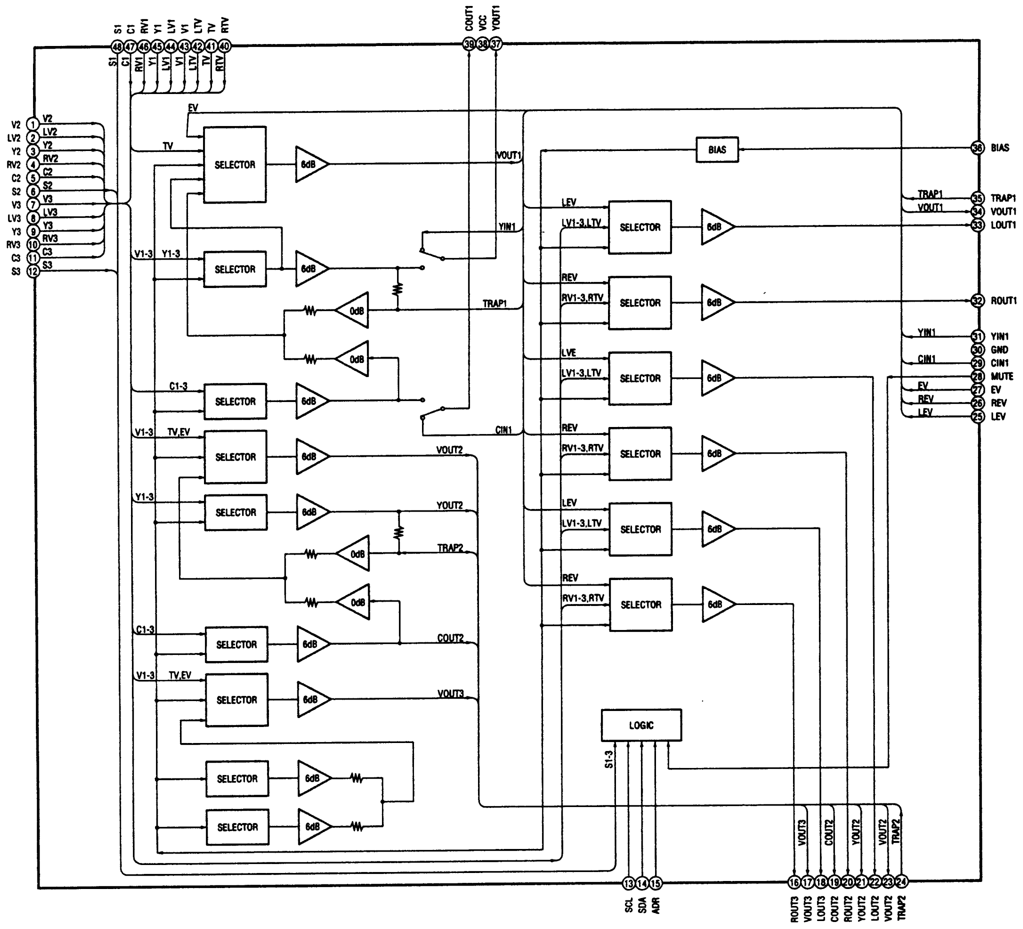
CXA1211M-T4 (IC9204)


Vcc
IN 2
CONT 2
OUT 2
VCA 2
VCA 1
IN 1
CONT 1
OUT 1
GND

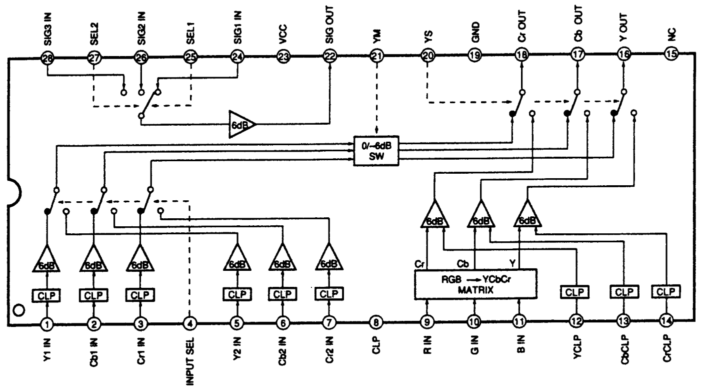
CXA1839Q-T6 (IC1602)


GND
Y1-IN
RY1-IN
BY1-IN
GND1
VCC1
YUV-SW
VM-MUTE
SP-MUTE
VM-OUT
CLP-C
APED-C
BY2-IN
RY2-IN
Y2-IN
NC
1REF
C-OFF
GND
ROUT
GOUT
BOUT
ABL-REQ
ABL-MUTE
YUV-SW
VM Amp Sharpness
NR Clamp D-Picture
IREF
CEC
Hue Color
Axis
Matrix Clamp
Pulse Interface
ABL Amp
D-Color Bright
YS2 YM2
Picture Clamp
YS1 YM1
Amp Clamp
Amp Clamp
Bus Dec
AP-MUTE
CLP1
BGP
CBLK
FFTIM
VS
VEQ
VBLK
VTIM
SSCP
SCL
SDA
LR2-IN
LG2-IN
LB2-IN
YS2
YM2
VCC2
GND2
LR1-IN
LG1-IN
LB1-IN
YS1
YM1

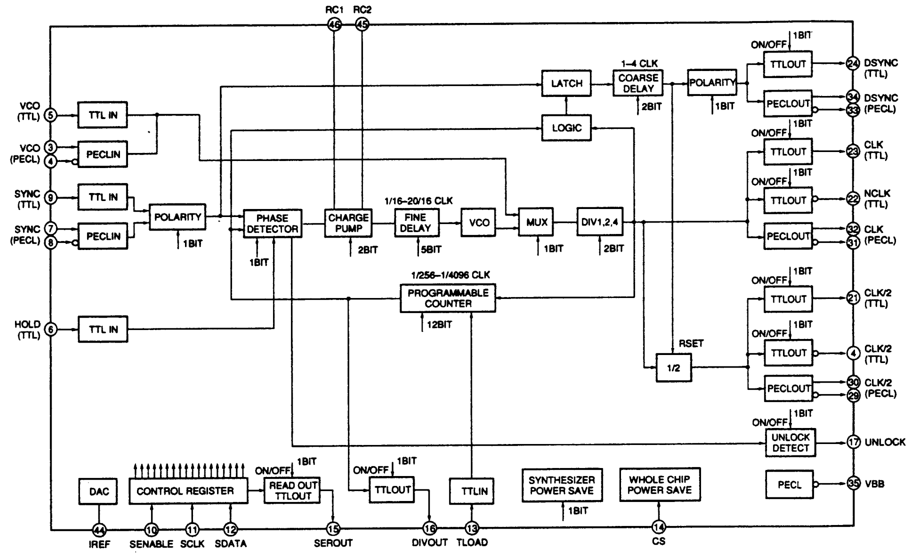
CXA1855Q (IC1101)


SELECTOR
6dB
0dB
BIAS
LOGIC
TRAP1
VOUT1
LOUT1
ROUT1
YIN1
GND
CIN1
MUTE
EV
REV
LEV
COUT1
VCC
YOUT1
SCL
SDA
ADR
ROUT3
VOUT3
LOUT3
COUT2
ROUT2
LOUT2
YOUT2
VOUT2
TRAP2
S1-3

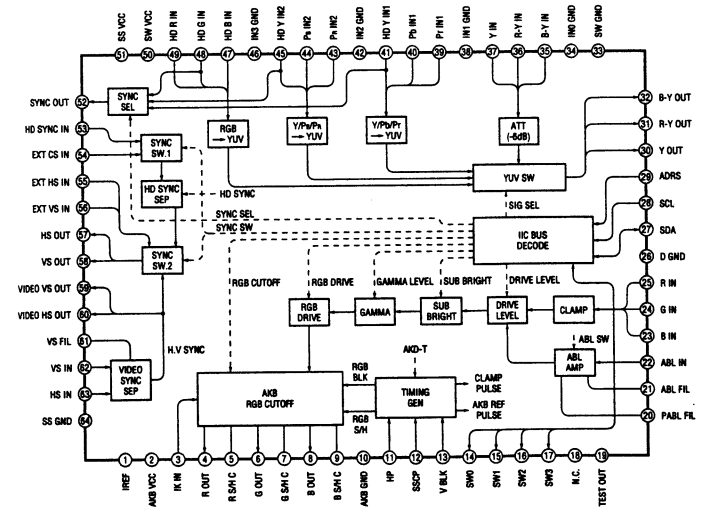
CXA2119M (IC1410)


SIG3 IN
SEL2
SIG2 IN
SEL1
SIG1 IN
VCC
SIG OUT
YM
YS
GND
Cr OUT
Cb OUT
Y OUT
NC
0/–6dB SW
6dB
CLP
RGB → YCbCr MATRIX
Y1 IN
Cb1 IN
Cr1 IN
INPUT SEL
Y2 IN
Cb2 IN
Cr2 IN
CLP
R IN
G IN
B IN
YCLP
CbCLP
CrCLP

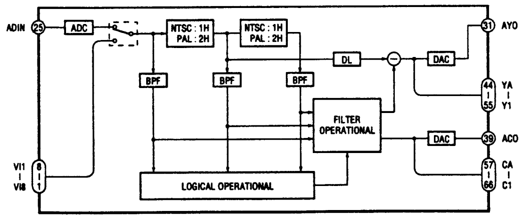
CXA3106AQ (IC1905)


RC1
RC2
VCO (TTL)
VCO (PECL)
SYNC (TTL)
SYNC (PECL)
HOLD (TTL)
TTL IN
PECLIN
POLARITY
PHASE DETECTOR
CHARGE PUMP
FINE DELAY
VCO
MUX
DIV1,2,4
1/16–20/16 CLK
LATCH
LOGIC
1–4 CLK COARSE DELAY
POLARITY
PROGRAMMABLE COUNTER
1/256–1/4096 CLK
12BIT
RSET
1/2
TTLOUT
PECLOUT
DSYNC (TTL)
DSYNC (PECL)
CLK (TTL)
NCLK (TTL)
CLK (PECL)
CLK/2 (TTL)
CLK/2 (PECL)
UNLOCK DETECT
UNLOCK
PECL
VBB
DAC
CONTROL REGISTER
READ OUT TTLOUT
TTLIN
SYNTHESIZER POWER SAVE
WHOLE CHIP POWER SAVE
ON/OFF
1BIT
IREF
SENABLE
SCLK
SDATA
SEROUT
DIVOUT
TLOAD
CS

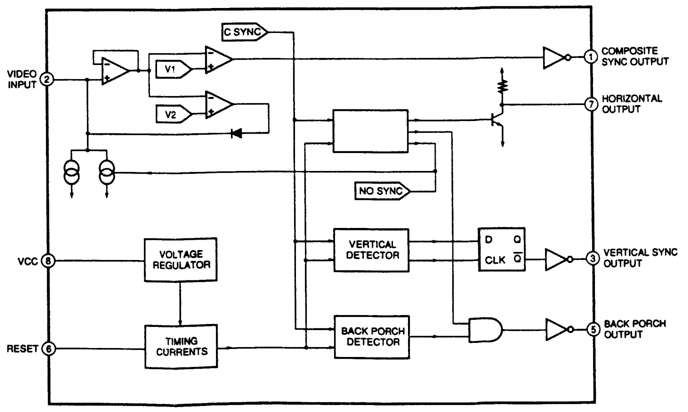
CXA2011Q (IC1601)


SYNC SEL
SYNC SW 1
HD SYNC SEP
SYNC SW 2
VIDEO SYNC SEP
RGB → YUV
Y/Pb/Pr → YUV
ATT (-6dB)
YUV SW
IIC BUS DECODE
RGB DRIVE
GAMMA
SUB BRIGHT
DRIVE LEVEL
CLAMP
ABL AMP
AKB RGB CUTOFF
TIMING GEN
SYNC OUT
HD SYNC IN
EXT CS IN
EXT HS IN
EXT VS IN
HS OUT
VS OUT
VIDEO VS OUT
VIDEO HS OUT
VS FIL
VS IN
HS IN
SS GND
B-Y OUT
R-Y OUT
Y OUT
ADRS
SCL
SDA
D GND
R IN
G IN
B IN
ABL IN
ABL FIL
PABL FIL
CLAMP PULSE
AKB REF PULSE

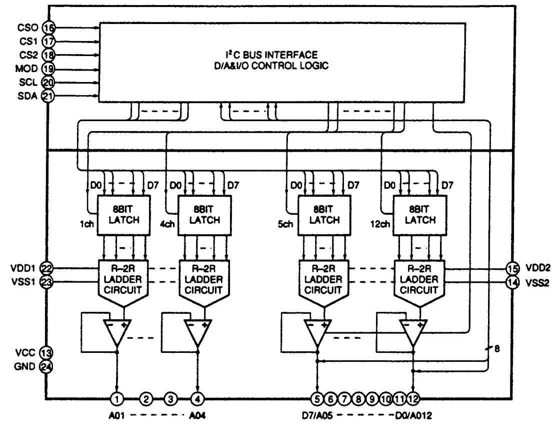
CXD2024AQ (IC1104)


ADIN
ADC
NTSC : 1H PAL : 2H
BPF
DL
DAC
FILTER OPERATIONAL
LOGICAL OPERATIONAL
AYO
YA
Y1
ACO
CA
C1
VI1
VI8

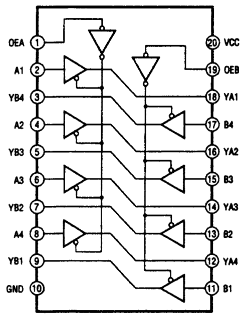
GS4981CTA (IC1406)


C SYNC
VIDEO INPUT
V1
V2
NO SYNC
VCC
RESET
VOLTAGE REGULATOR
TIMING CURRENTS
VERTICAL DETECTOR
BACK PORCH DETECTOR
D Q
CLK Q̄
COMPOSITE SYNC OUTPUT
HORIZONTAL OUTPUT
VERTICAL SYNC OUTPUT
BACK PORCH OUTPUT

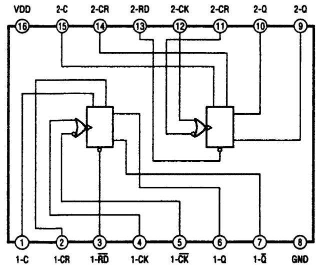
MB88141APFV-ER (IC1004, 1008)


CSO
CS1
CS2
MOD
SCL
SDA
I²C BUS INTERFACE
D/A&I/O CONTROL LOGIC
8BIT LATCH
R-2R LADDER CIRCUIT
VDD1
VSS1
VDD2
VSS2
VCC
GND
AO1
AO4
D7/AO5
D0/AO12

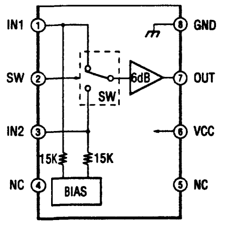
MC74F244MEL (IC9104, 9105)


OEA
A1
YB4
A2
YB3
A3
YB2
A4
YB1
GND
VCC
OEB
YA1
B4
YA2
B3
YA3
B2
YA4
B1

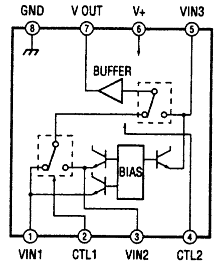
MC74HC4538AF-T2 (IC1409)


VDD
2-C
2-CR
2-RD
2-CK
2-CR
2-Q
2-Q
1-C
1-CR
1-RD
1-CK
1-CK
1-Q
1-Q
GND

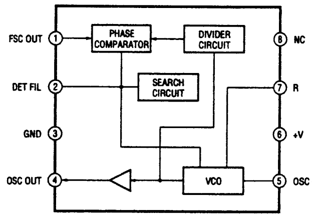
MM1112XFBE (IC1403, 1404)


IN1
SW
IN2
NC
GND
OUT
VCC
NC
6dB
SW
15K
15K
BIAS

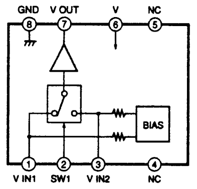
NJM2235M-T1 (IC1102)


GND
V OUT
V+
VIN3
BUFFER
BIAS
VIN1
CTL1
VIN2
CTL2

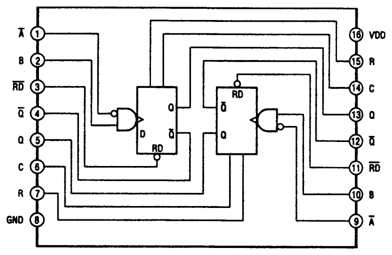
NJM2240M (IC1103)


FSC OUT
DET FIL
GND
OSC OUT
PHASE COMPARATOR
DIVIDER CIRCUIT
SEARCH CIRCUIT
VCO
NC
R
+V
OSC C

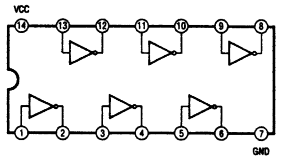
NJM2533M (IC1105, 1106)


GND
V OUT
V
NC
BIAS
V IN1
SW1
V IN2
NC

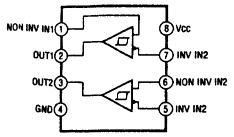
PC74HC123D-T (IC1909, 9005)


A
B
RD
Q
Q
C
R
GND
VDD
R
C
Q
Q
RD
B
A

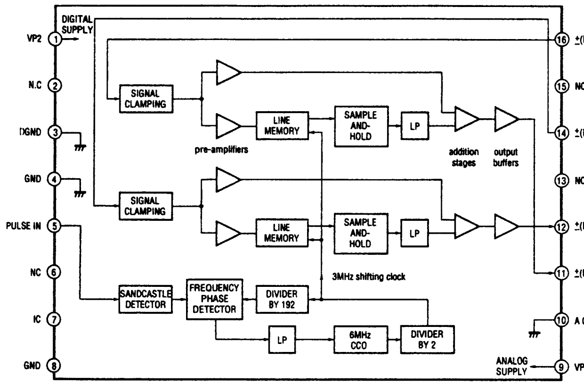
SN74HCU04ANS-E20 (IC1251)



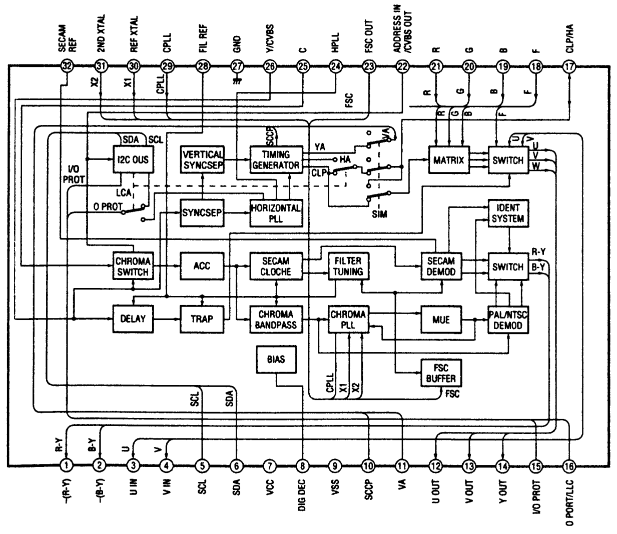
SN75157 (IC1903)


NON INV IN1
OUT1
OUT2
GND
VCC
INV IN2
NON INV IN2
INV IN2

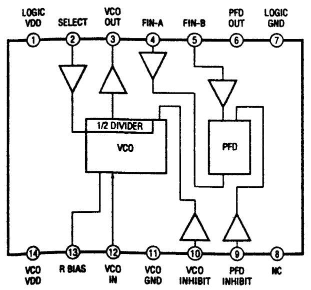
TDA4665T-T (IC1401)


DIGITAL SUPPLY
SIGNAL CLAMPING
LINE MEMORY
SAMPLE AND-HOLD
LP
pre-amplifiers
addition stages
output buffers
SANDCASTLE DETECTOR
FREQUENCY PHASE DETECTOR
DIVIDER BY 192
6MHz CCO
DIVIDER BY 2
3MHz shifting clock
ANALOG SUPPLY
VP2
N.C
DGND
GND
PULSE IN
NC
IC
GND
±(R-Y)IN
NC
±(B-Y)IN
NC
±(B-Y)OUT
±(R-Y)OUT
A GND
VP1

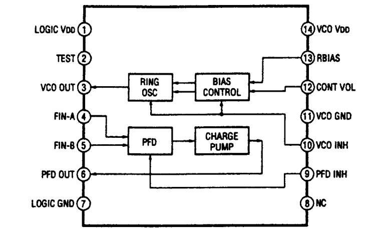
TDA9141-N2C (IC1402)


SECAM REF
2ND XTAL
REF XTAL
CPLL
FIL REF
GND
Y/CVBS
C
HPLL
FSC OUT
ADDRESS IN /CVBS OUT
R
G
B
F
CLP/HA
I2C BUS
VERTICAL SYNCSEP
TIMING GENERATOR
MATRIX
SWITCH
SYNCSEP
HORIZONTAL PLL
IDENT SYSTEM
CHROMA SWITCH
ACC
SECAM CLOCHE
FILTER TUNING
SECAM DEMOD
DELAY
TRAP
CHROMA BANDPASS
CHROMA PLL
MUE
PAL/NTSC DEMOD
BIAS
FSC BUFFER
SIM
I/O PROT
-(R-Y)
-(B-Y)
U IN
V IN
SCL
SDA
VCC
DIG DEC
VSS
SCCP
VA
U OUT
V OUT
Y OUT
I/O PORT/LLC

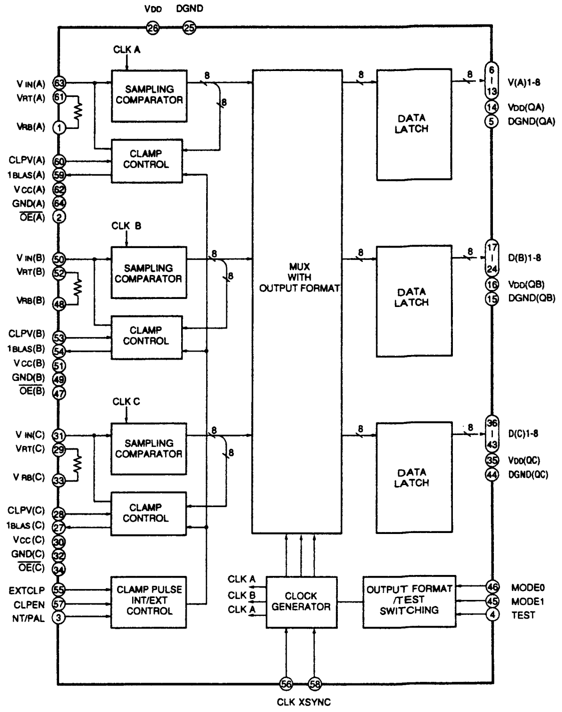
TLC2932IPW-E20 (IC9001)


LOGIC VDD
SELECT
VCO OUT
FIN-A
FIN-B
PFD OUT
LOGIC GND
1/2 DIVIDER
VCO
PFD
VCO VDD
R BIAS
VCO IN
VCO GND
VCO INHIBIT
PFD INHIBIT
NC

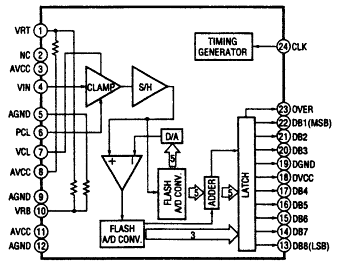
TLC2933IPW-E20 (IC9004)

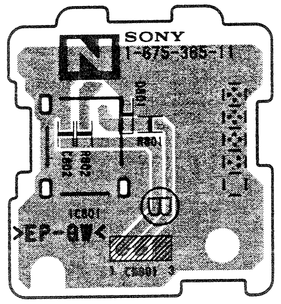

LOGIC VDD
TEST
VCO OUT
FIN-A
FIN-B
PFD OUT
LOGIC GND
RING OSC
BIAS CONTROL
PFD
CHARGE PUMP
VCO VDD
RBIAS
CONT VOL
VCO GND
VCO INH
PFD INH
NC

TLC5733AIPM (IC9006)


VDD
DGND
CLK A
CLK B
CLK C
SAMPLING COMPARATOR
CLAMP CONTROL
MUX WITH OUTPUT FORMAT
DATA LATCH
CLAMP PULSE INT/EXT CONTROL
CLOCK GENERATOR
OUTPUT FORMAT /TEST SWITCHING
EXTCLP
CLPEN
NT/PAL
D(A)1-8
D(B)1-8
D(C)1-8
MODE0
MODE1
TEST
CLK XSYNC

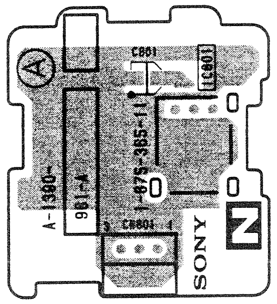
uPC659AGS-E2 (IC1253)


VRT
NC
AVCC
VIN
AGND
PCL
VCL
AVCC
AGND
VRB
AVCC
AGND
TIMING GENERATOR
CLAMP
S/H
D/A
FLASH A/D CONV.
ADDER
LATCH
CLK
OVER
DB1(MSB)
DB2
DB3
DGND
DVCC
DB4
DB5
DB6
DB7
DB8(LSB)


SONY
1-675-385-11
N
IC801
R801
CN801
>EP-QW<
B

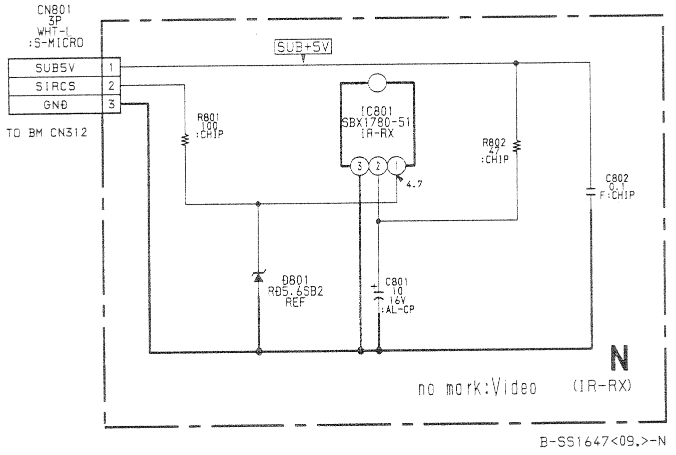
N – B SIDE –

SUFFIX ; -11


A
C801
IC801
CN801
1-675-385-11
A-1300-981-A
SONY
N

N – A SIDE –

SUFFIX ; -11

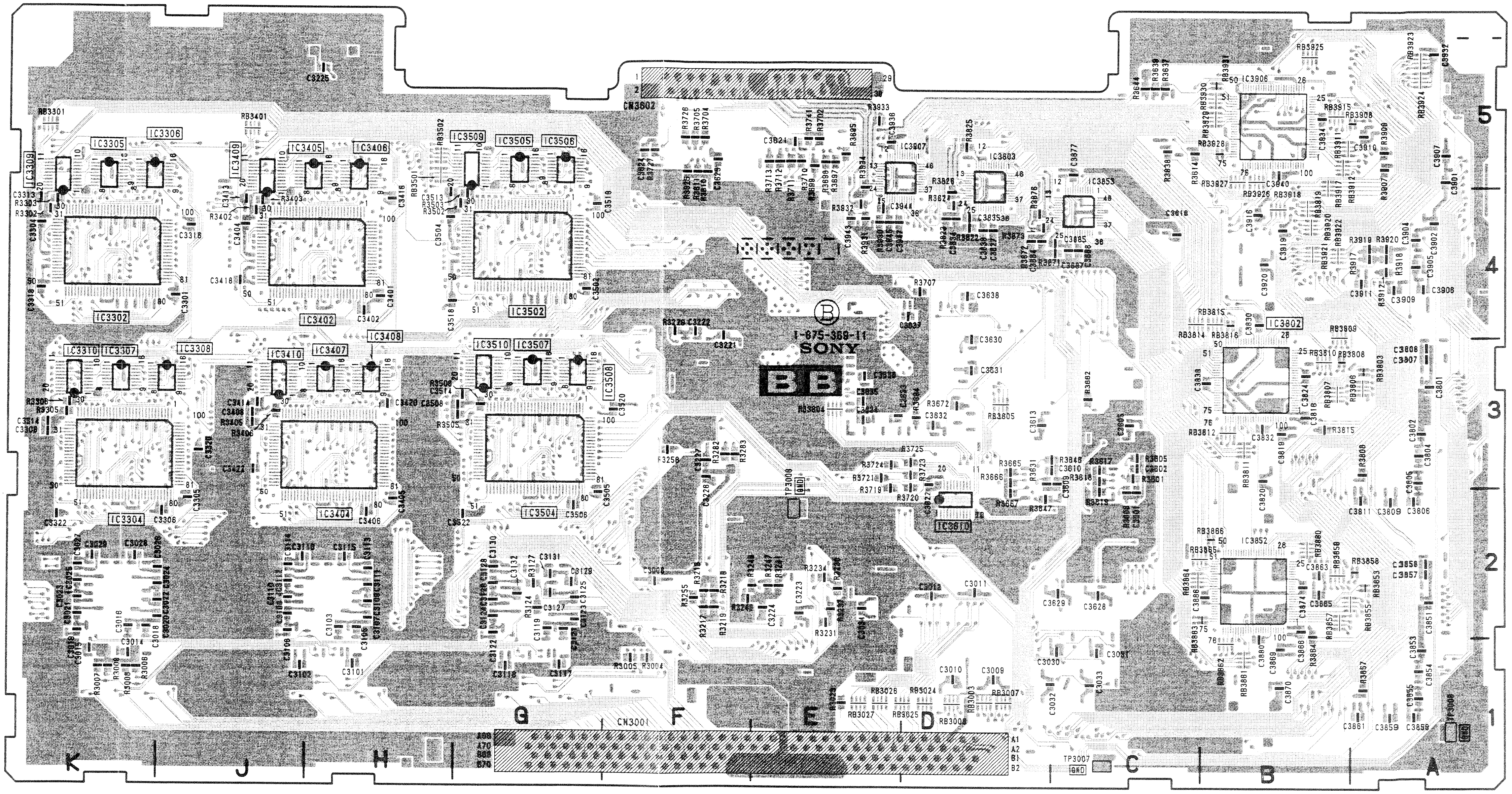

CN801
3P
WHT-L
:S-MICRO
SUB5V 1
SIRCS 2
GND 3
TO BM CN312
SUB+5V
R801
100
:CHIP
IC801
SBX1780-51
IR-RX
3 2 1
4.7
R802
47
:CHIP
C802
0.1
F:CHIP
D801
RD5.6SB2
REF
C801
10
16V
:AL-CP
N
no mark:Video
(IR-RX)
B-SS1647<09.>-N

BB BB

—
BB
—
1-675-369-11

IC3001	D-2
IC3002	E-2
IC3003	D-1
IC3004	D-1
IC3005	F-2
IC3006	F-1
IC3007	K-1
IC3008	C-2
IC3009	C-2
IC3010	D-1
IC3011	C-1
IC3012	E-2
IC3101	J-1
IC3102	H-2
IC3201	E-2
IC3202	F-3
IC3203	F-4
IC3204	F-4
IC3301	K-4
IC3303	K-3
IC3401	H-4
IC3403	J-3
IC3501	G-4
IC3503	H-3
IC3601	C-2
IC3602	C-5
IC3603	C-3
IC3604	D-2
IC3605	C-4
IC3606	B-4
IC3607	E-3
IC3608	E-4
IC3609	E-5
IC3611	F-5
IC3612	F-5
IC3613	C-2
IC3614	C-2
IC3801	A-3
IC3851	A-1
IC3901	A-4
IC3902	A-4
IC3903	B-5
IC3904	B-5
IC3905	A-5

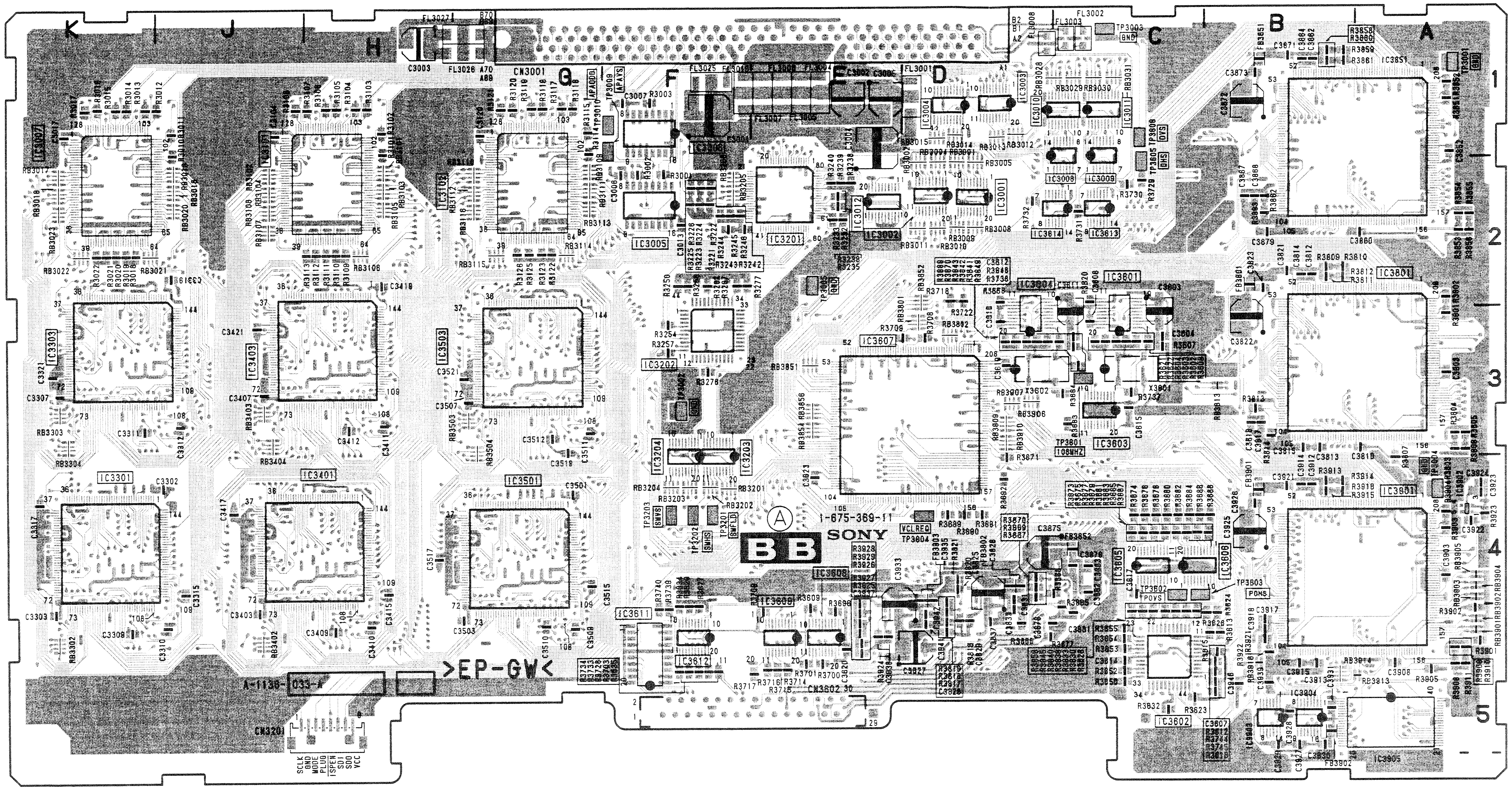
TP3001	A-1
TP3002	F-3
TP3003	C-1
TP3994	A-4
TP3005	E-2
TP3009	F-1
TP3010	G-1
TP3201	F-4
TP3202	F-4
TP3203	F-4
TP3601	C-3
TP3602	C-4
TP3603	B-4
TP3604	D-4
TP3605	C-2
TP3606	C-1



BB – B SIDE –

SUFFIX ; -11

BB BB


K
J
H
G
F
E
D
C
B
A
1
2
3
4
5
CN3001
CN3602
CN3201
1-675-369-11
SONY
BB
>EP-GW<
A-1130-033-A
SCLK
GND
MODE
PLUG
TSPEN
SDI
SDO
VCC

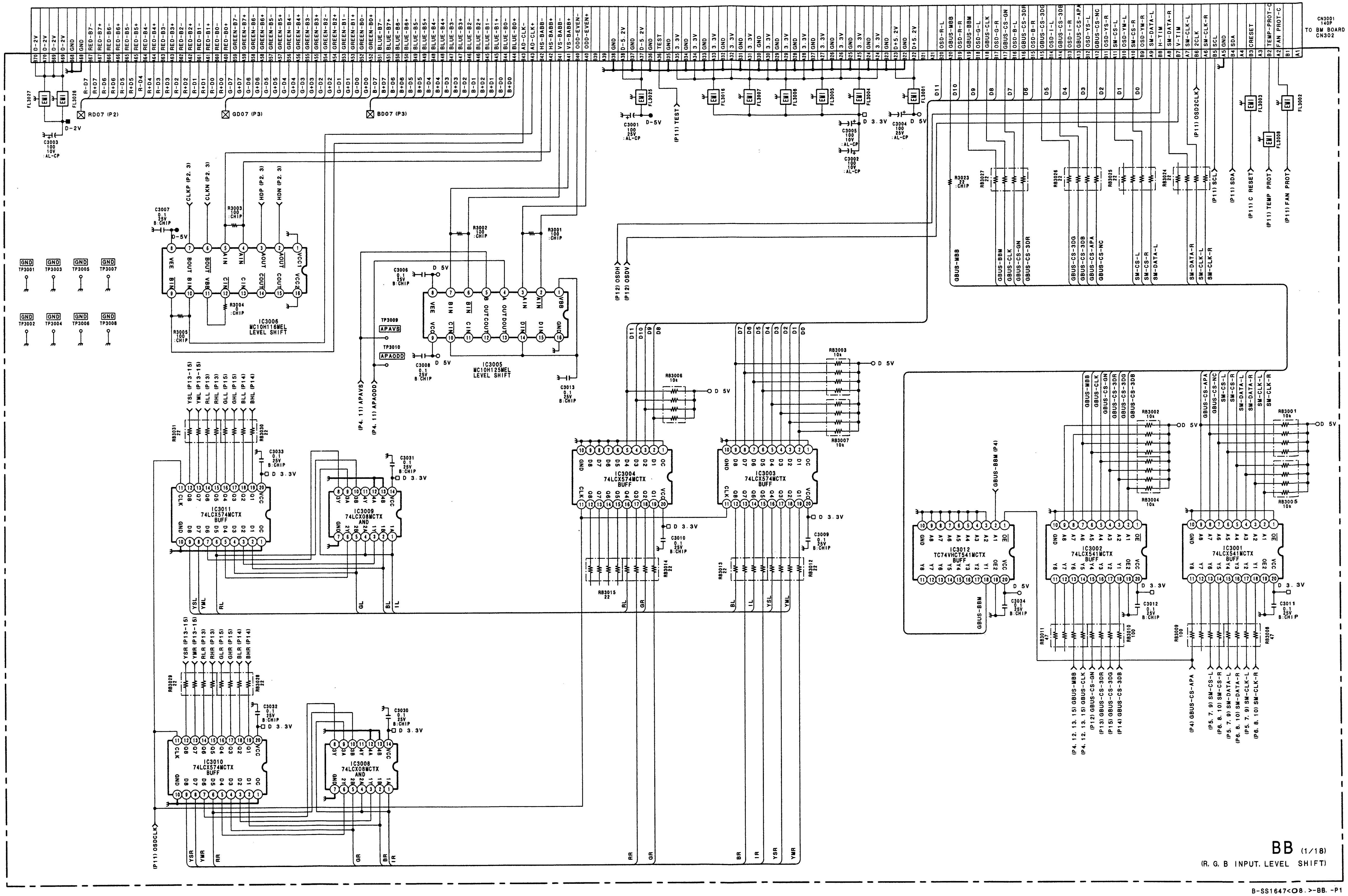
BB – A SIDE –

SUFFIX ; -11

—
BB
—
1-675-369-11

IC3302	K-4
IC3304	K-2
IC3305	K-5
IC3306	K-5
IC3307	K-3
IC3308	J-3
IC3309	K-5
IC3310	K-3
IC3402	H-4
IC3403	H-2
IC3405	J-5
IC3406	H-5
IC3407	H-3
IC3408	H-3
IC3409	J-5
IC3410	J-3
IC3502	G-4
IC3504	G-2
IC3505	G-5
IC3506	G-5
IC3507	G-3
IC3508	F-3
IC3509	G-5
IC3510	G-3
IC3610	D-2
IC3802	B-4
IC3803	D-5
IC3852	B-2
IC3853	C-5
IC3906	B-5
IC3907	D-5
TP3006	E-2

• Refer to page 10-28, 10-29 for Printed Wiring Board


CN3001
140P
TO BM BOARD
CN302
IC3006
MC10H116MEL
LEVEL SHIFT
IC3005
MC10H125MEL
LEVEL SHIFT
IC3011
74LCX574MCTX
BUFF
IC3009
74LCX08MCTX
AND
IC3010
74LCX574MCTX
BUFF
IC3008
74LCX08MCTX
AND
IC3004
74LCX574MCTX
BUFF
IC3003
74LCX574MCTX
BUFF
IC3012
TC74VHCT541MCTX
BUFF
IC3002
74LCX541MCTX
BUFF
IC3001
74LCX541MCTX
BUFF
RD07 (P2)
GD07 (P3)
BD07 (P3)
CLKP (P2, 3)
CLKN (P2, 3)
HDP (P2, 3)
HDN (P2, 3)
(P11) TEST
(P11) OSD2CLK
(P11) SCL
(P11) SDA
(P11) C RESET
(P11) TEMP PROT
(P11) FAN PROT
(P12) OSDH
(P12) OSDV
(P4, 11) APAVS
(P4, 11) APAODD
(P11) OSDCLK
GBUS-BBM (P4)
TP3009
APAVS
TP3010
APAODD
GND
TP3001
TP3003
TP3005
TP3007
TP3002
TP3004
TP3006
TP3008
D 5V
D 3.3V
D-5V
D-2V
BB (1/18)
(R. G. B INPUT. LEVEL SHIFT)
B-SS1647<O8.>-BB. -P1
1
2
3
4
5
A
B
C
D
E
F
G
H

- Refer to page 10-28, 10-29 for Printed Wiring Board

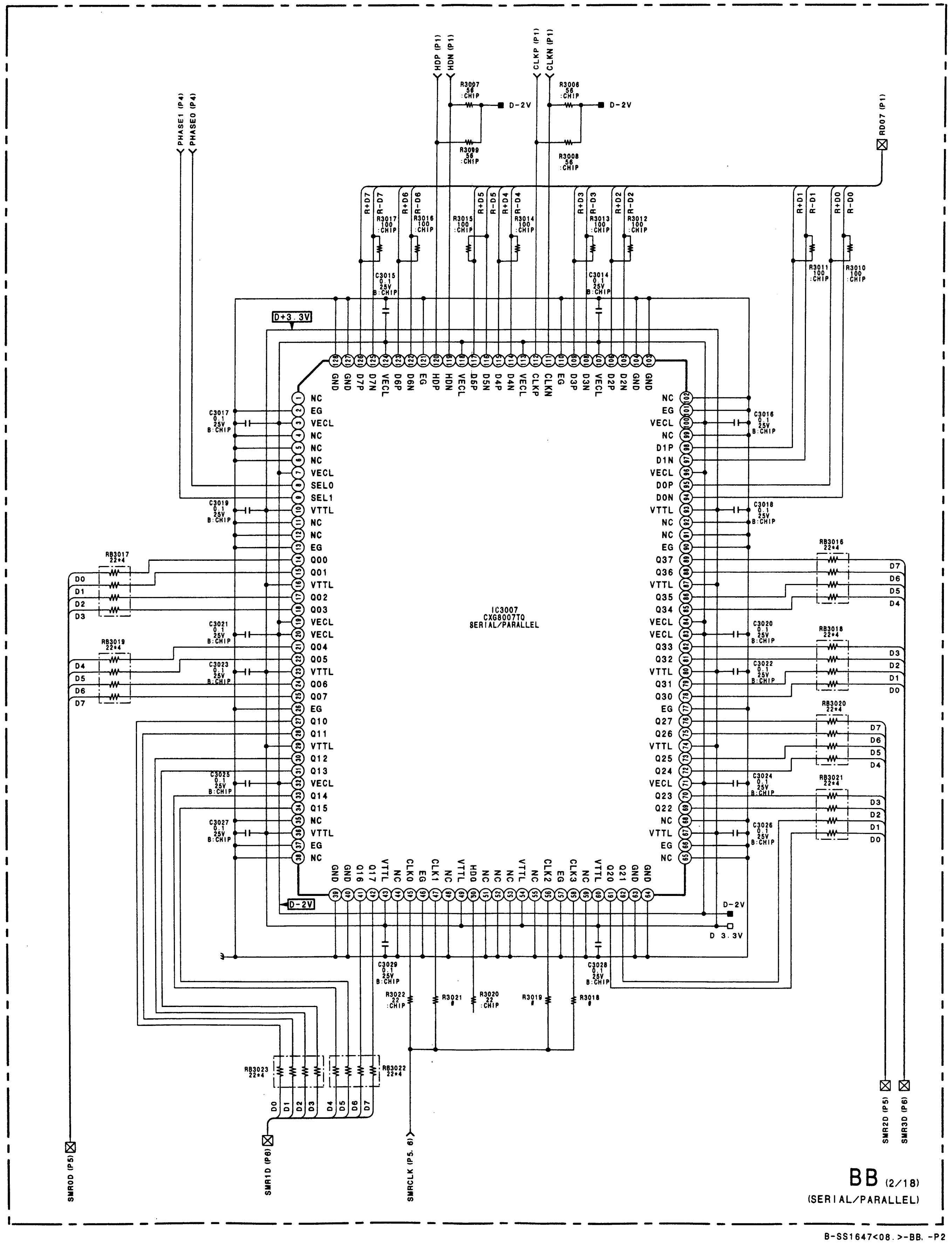
1

2

3

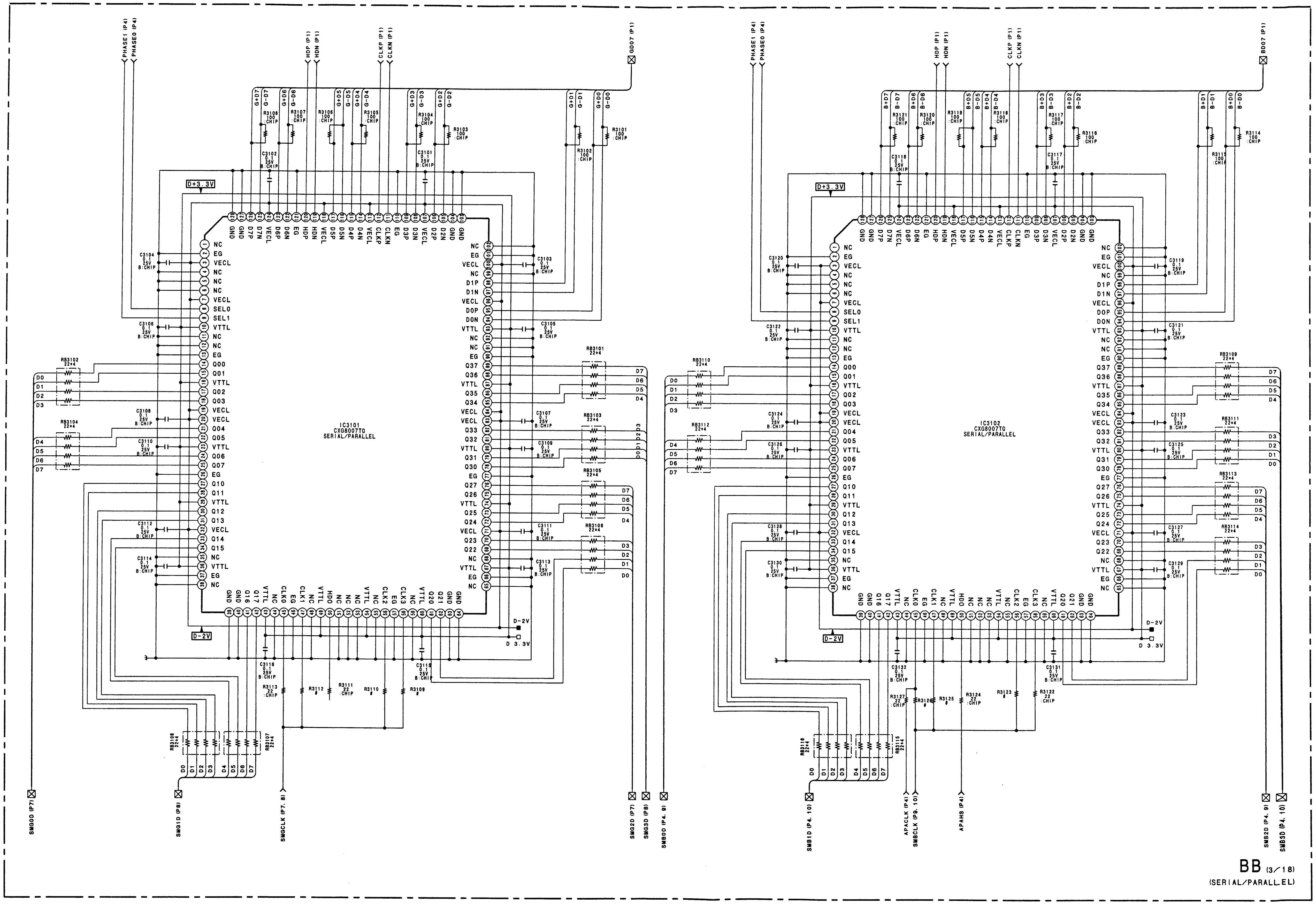
4

5


HDP (P1)
HDN (P1)
CLKP (P1)
CLKN (P1)
R3007 56 :CHIP
R3009 56 :CHIP
R3006 56 :CHIP
R3008 56 :CHIP
D-2V
PHASE1 (P4)
PHASE0 (P4)
RD07 (P1)
R+D7
R-D7
R+D6
R-D6
R+D5
R-D5
R+D4
R-D4
R+D3
R-D3
R+D2
R-D2
R+D1
R-D1
R+D0
R-D0
R3017 100 :CHIP
R3016 100 :CHIP
R3015 100 :CHIP
R3014 100 :CHIP
R3013 100 :CHIP
R3012 100 :CHIP
R3011 100 :CHIP
R3010 100 :CHIP
C3015 0.1 25V B:CHIP
C3014 0.1 25V B:CHIP
D+3.3V
IC3007
CXG8007TQ
SERIAL/PARALLEL
RB3017 22×4
RB3019 22×4
RB3016 22×4
RB3018 22×4
RB3020 22×4
RB3021 22×4
RB3023 22×4
RB3022 22×4
C3017 0.1 25V B:CHIP
C3019 0.1 25V B:CHIP
C3021 0.1 25V B:CHIP
C3023 0.1 25V B:CHIP
C3025 0.1 25V B:CHIP
C3027 0.1 25V B:CHIP
C3016 0.1 25V B:CHIP
C3018 0.1 25V B:CHIP
C3020 0.1 25V B:CHIP
C3022 0.1 25V B:CHIP
C3024 0.1 25V B:CHIP
C3026 0.1 25V B:CHIP
C3029 0.1 25V B:CHIP
C3028 0.1 25V B:CHIP
R3022 22 :CHIP
R3021 ∞
R3020 22 :CHIP
R3019 ∞
R3018 ∞
D0
D1
D2
D3
D4
D5
D6
D7
D-2V
D 3.3V
SMR0D (P5)
SMR1D (P6)
SMRCLK (P5, 6)
SMR2D (P5)
SMR3D (P6)
BB (2/18)
(SERIAL/PARALLEL)
B-SS1647<08.>-BB.-P2

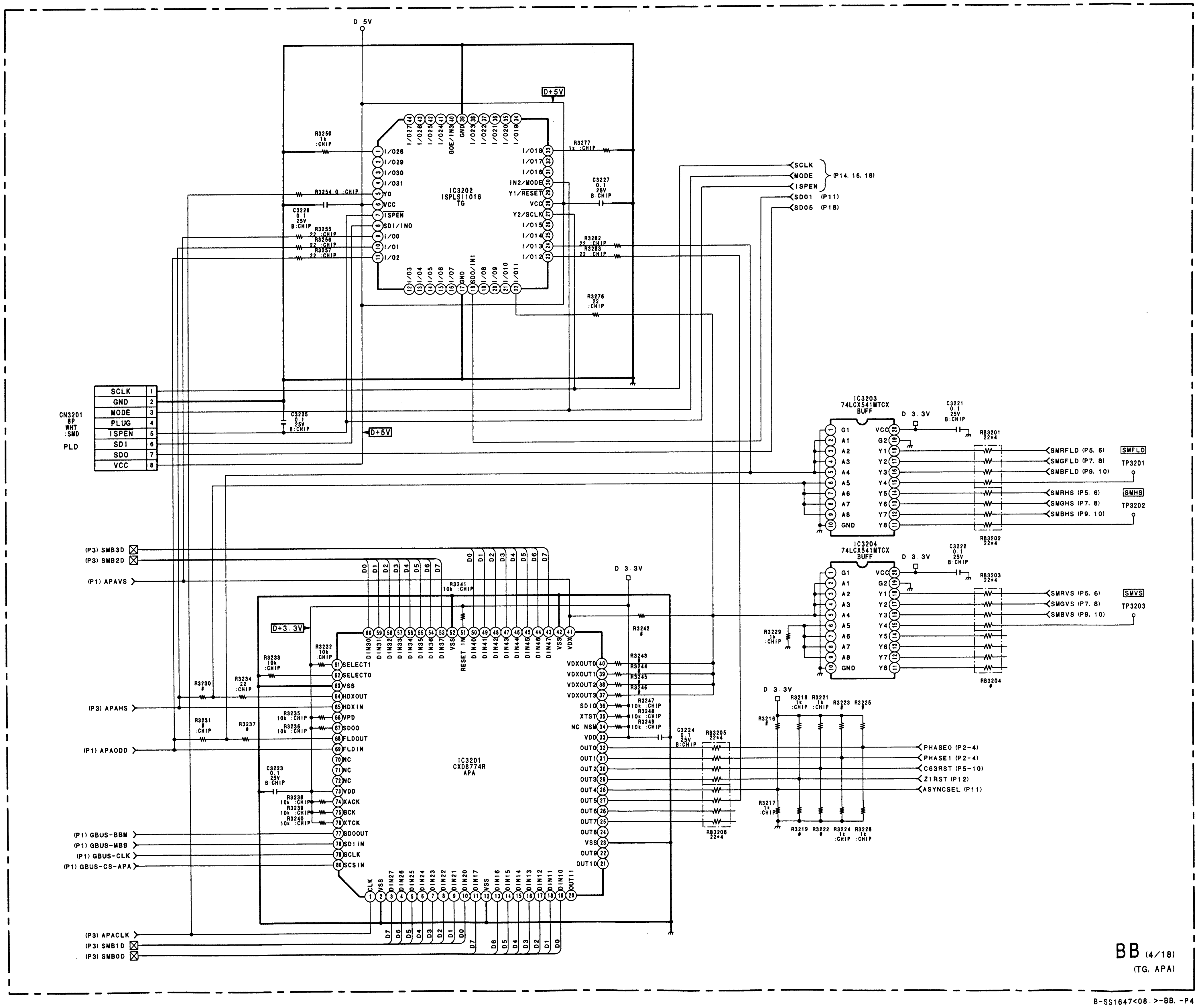
A B C D E F G H

- Refer to page 10-28, 10-29 for Printed Wiring Board

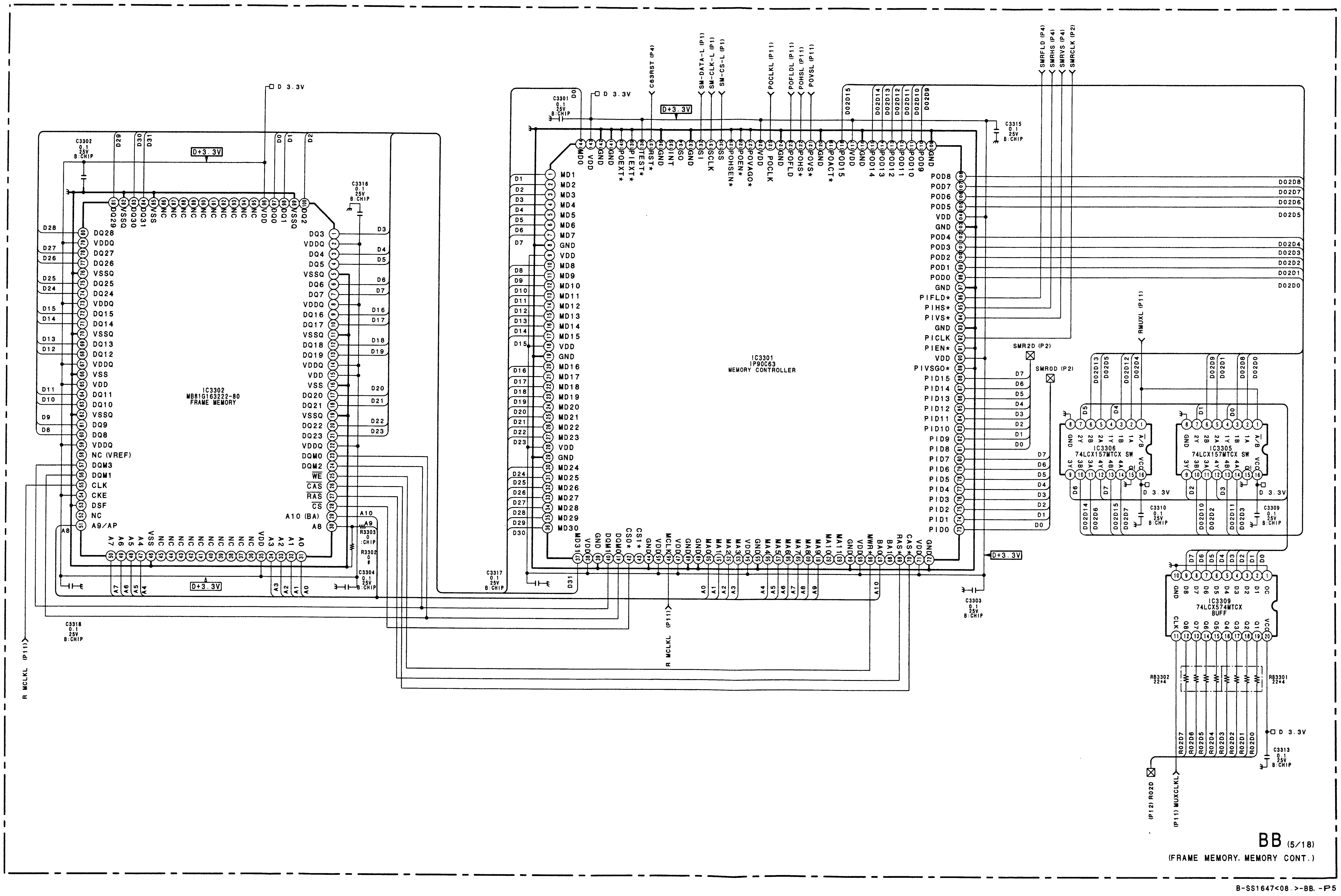

PHASE1 (P4)
PHASE0 (P4)
HDP (P1)
HDN (P1)
CLKP (P1)
CLKN (P1)
GDD7 (P1)
BDD7 (P1)
D+3.3V
D-2V
D 3.3V
IC3101
CXG8007TQ
SERIAL/PARALLEL
IC3102
CXG8007TQ
SERIAL/PARALLEL
SMG0D (P7)
SMG1D (P8)
SMGCLK (P7, 8)
SMG2D (P7)
SMG3D (P8)
SMB0D (P4, 9)
SMB1D (P4, 10)
APACLK (P4)
SMBCLK (P9, 10)
APAHS (P4)
SMB2D (P4, 9)
SMB3D (P4, 10)
RB3101 22×4
RB3102 22×4
RB3103 22×4
RB3104 22×4
RB3105 22×4
RB3106 22×4
RB3107 22×4
RB3108 22×4
RB3109 22×4
RB3110 22×4
RB3111 22×4
RB3112 22×4
RB3113 22×4
RB3114 22×4
RB3115 22×4
RB3116 22×4
D0
D1
D2
D3
D4
D5
D6
D7
BB (3/18)
(SERIAL/PARALLEL)

B-SS1647<08.>-BB.-P3

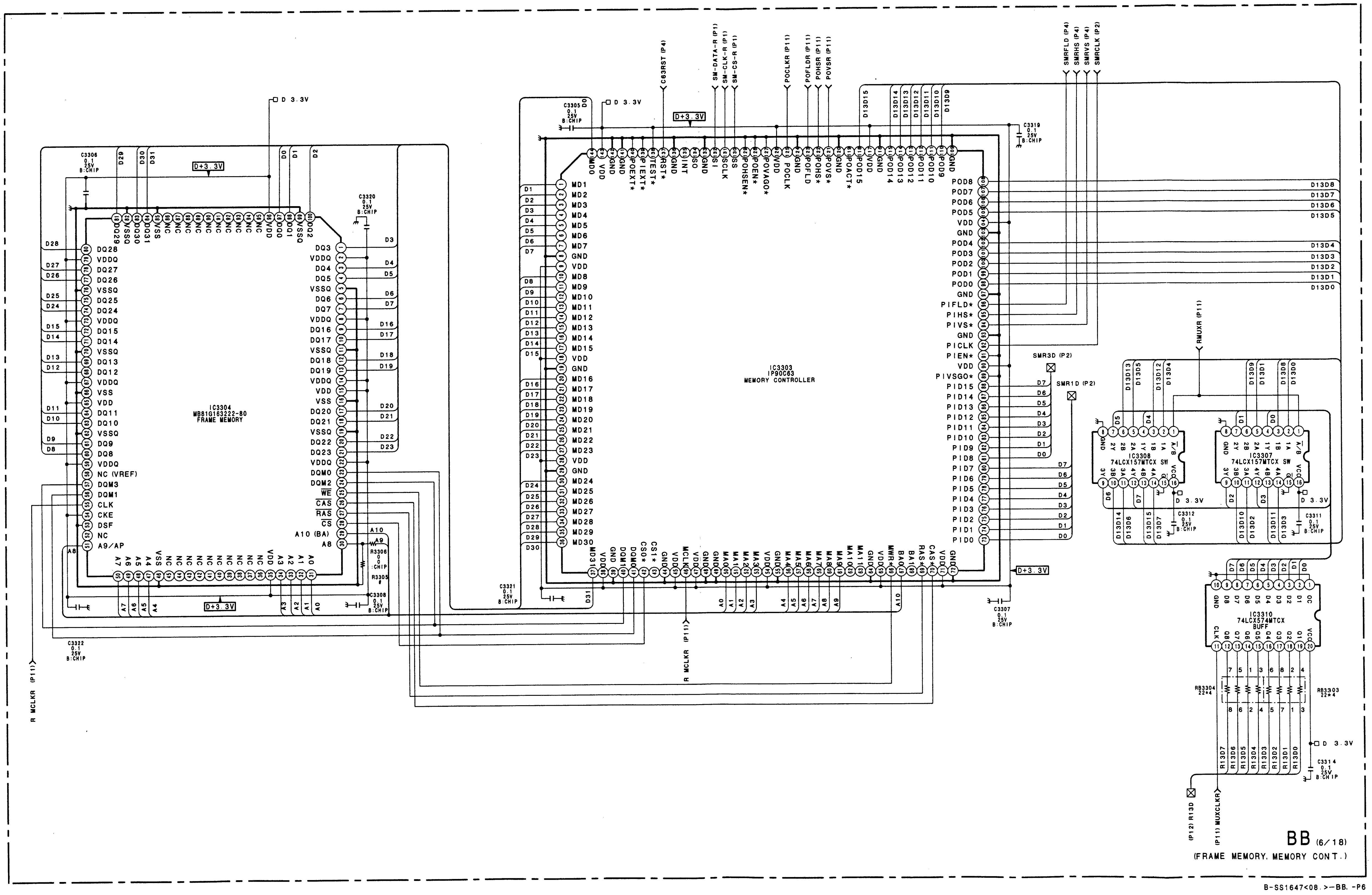
- Refer to page 10-28, 10-29 for Printed Wiring Board


D 5V
D+5V
IC3202
ISPLSI1016
TG
R3250 1k :CHIP
R3254 0 :CHIP
C3226 0.1 25V B:CHIP
R3255 22 :CHIP
R3256 22 :CHIP
R3257 22 :CHIP
R3277 1k :CHIP
C3227 0.1 25V B:CHIP
R3282 22 :CHIP
R3283 22 :CHIP
R3276 22 :CHIP
SCLK
MODE
ISPEN
(P14, 16, 18)
SDO1 (P11)
SDO5 (P18)
CN3201 8P WHT :SMD
PLD
SCLK 1
GND 2
MODE 3
PLUG 4
ISPEN 5
SDI 6
SDO 7
VCC 8
C3225 0.1 25V B:CHIP
IC3203
74LCX541MTCX
BUFF
D 3.3V
C3221 0.1 25V B:CHIP
RB3201 22×4
RB3202 22×4
SMRFLD (P5, 6)
SMGFLD (P7, 8)
SMBFLD (P9, 10)
SMFLD
TP3201
SMRHS (P5, 6)
SMGHS (P7, 8)
SMBHS (P9, 10)
SMHS
TP3202
IC3204
74LCX541MTCX
BUFF
C3222 0.1 25V B:CHIP
RB3203 22×4
RB3204
SMRVS (P5, 6)
SMGVS (P7, 8)
SMBVS (P9, 10)
SMVS
TP3203
R3229 1k :CHIP
(P3) SMB3D
(P3) SMB2D
(P1) APAVS
(P3) APAHS
(P1) APAODD
(P1) GBUS-BBM
(P1) GBUS-MBB
(P1) GBUS-CLK
(P1) GBUS-CS-APA
(P3) APACLK
(P3) SMB1D
(P3) SMB0D
D+3.3V
D 3.3V
IC3201
CXD8774R
APA
R3241 10k :CHIP
R3242
R3243
R3244
R3245
R3246
R3247 10k :CHIP
R3248 10k :CHIP
R3249 10k :CHIP
R3230
R3231 :CHIP
R3232 10k :CHIP
R3233 10k :CHIP
R3234 22 :CHIP
R3235 10k :CHIP
R3236 10k :CHIP
R3237
R3238 10k :CHIP
R3239 10k :CHIP
R3240 10k :CHIP
C3223 0.1 25V B:CHIP
C3224 0.1 25V B:CHIP
RB3205 22×4
RB3206 22×4
R3216
R3217 1k :CHIP
R3218 1k :CHIP
R3219
R3221 1k :CHIP
R3222
R3223
R3224 1k :CHIP
R3225
R3226 1k :CHIP
PHASE0 (P2-4)
PHASE1 (P2-4)
C63RST (P5-10)
Z1RST (P12)
ASYNCSEL (P11)
BB (4/18)
(TG, APA)
B-SS1647<08>-BB.-P4

- Refer to page 10-28, 10-29 for Printed Wiring Board


IC3302
MB81G163222-80
FRAME MEMORY
IC3301
IP90C63
MEMORY CONTROLLER
IC3306
74LCX157MTCX SW
IC3305
74LCX157MTCX SW
IC3309
74LCX574MTCX
BUFF
RB3302
22*4
RB3301
22*4
C3302
C3316
C3318
C3304
C3317
C3301
C3315
C3303
C3310
C3309
C3313
R3303
R3302
D 3.3V
D+3.3V
C63RST (P4)
SM-DATA-L (P1)
SM-CLK-L (P1)
SM-CS-L (P1)
POCLKL (P11)
POFLDL (P11)
POHSL (P11)
POVSL (P11)
SMRFLD (P4)
SMRHS (P4)
SMRVS (P4)
SMRCLK (P2)
RMUXL (P11)
SMR2D (P2)
SMR0D (P2)
R MCLKL (P11)
(P12) R02D
(P11) MUXCLKL
BB (5/18)
(FRAME MEMORY, MEMORY CONT.)
B-SS1647<08>-BB.-P5

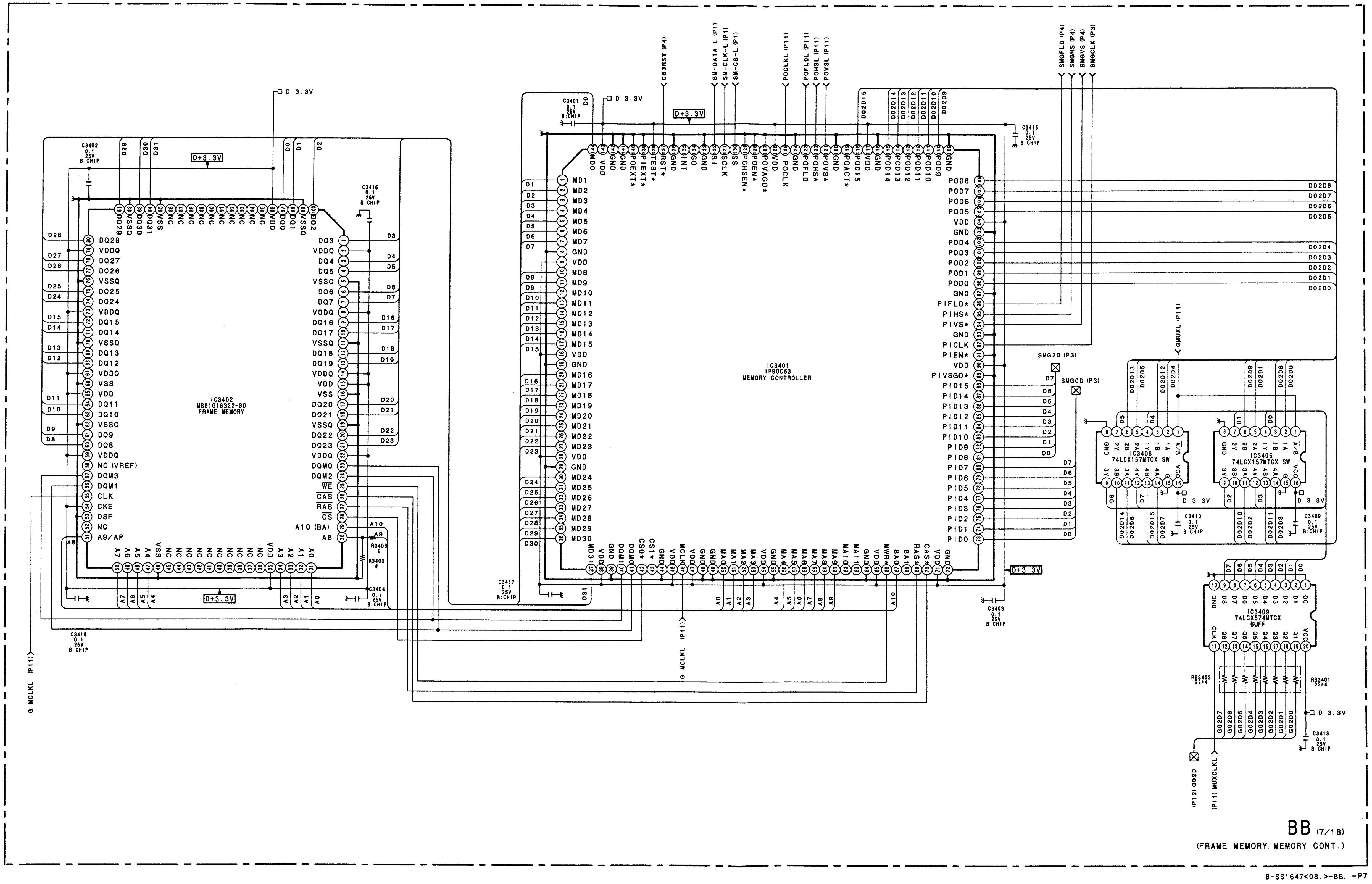
• Refer to page 10-28, 10-29 for Printed Wiring Board


IC3304
MB81G163222-80
FRAME MEMORY
IC3303
IP90C63
MEMORY CONTROLLER
IC3308
74LCX157MTCX SW
IC3307
74LCX157MTCX SW
IC3310
74LCX574MTCX
BUFF
RB3304 22×4
RB3303 22×4
D 3.3V
D+3.3V
C3306 0.1 25V B:CHIP
C3320 0.1 25V B:CHIP
C3305 0.1 25V B:CHIP
C3319 0.1 25V B:CHIP
C3321 0.1 25V B:CHIP
C3322 0.1 25V B:CHIP
C3307 0.1 25V B:CHIP
C3308 0.1 25V B:CHIP
C3312 0.1 25V B:CHIP
C3311 0.1 25V B:CHIP
C3314 0.1 25V B:CHIP
R3306 0 :CHIP
R3305
C83RST (P4)
SM-DATA-R (P11)
SM-CLK-R (P11)
SM-CS-R (P11)
POCLKR (P11)
POFLDR (P11)
POHSR (P11)
POVSR (P11)
SMRFLD (P4)
SMRHS (P4)
SMRVS (P4)
SMRCLK (P2)
SMR3D (P2)
SMR1D (P2)
RMUXR (P11)
R MCLKR (P11)
(P12) R13D
(P11) MUXCLKR
BB (6/18)
(FRAME MEMORY, MEMORY CONT.)
B-SS1647<08.>-BB.-P6

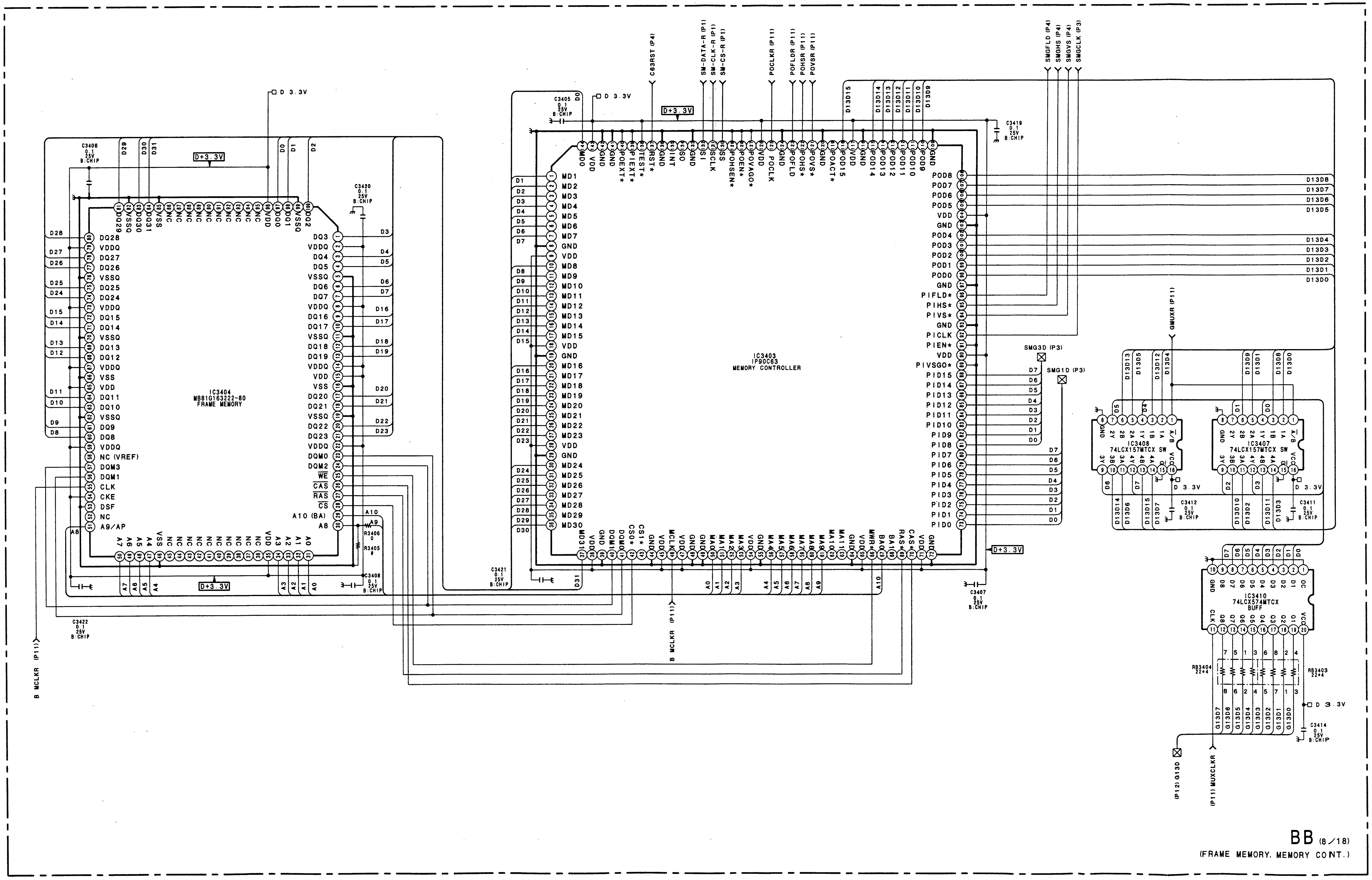
1
2
3
4
5

A | B | C | D | E | F | G | H

- Refer to page 10-28, 10-29 for Printed Wiring Board


IC3401
IP90C63
MEMORY CONTROLLER
IC3402
MB81G16322-80
FRAME MEMORY
IC3405
74LCX157MTCX SW
IC3406
74LCX157MTCX SW
IC3409
74LCX574MTCX
BUFF
D 3.3V
D+3.3V
C63RST (P4)
SM-DATA-L (P11)
SM-CLK-L (P11)
SM-CS-L (P11)
POCLKL (P11)
POFLDL (P11)
POHSL (P11)
POVSL (P11)
SMGFLD (P4)
SMGHS (P4)
SMGVS (P4)
SMGCLK (P3)
GMUXL (P11)
SMG2D (P3)
SMG0D (P3)
G MCLKL (P11)
(P12) G02D
(P11) MUXCLKL
RB3401
RB3402
R3402
R3403
C3401
C3402
C3403
C3404
C3409
C3410
C3413
C3415
C3416
C3417
C3418
BB (7/18)
(FRAME MEMORY, MEMORY CONT.)
B-SS1647<08.>-BB. -P7
1
2
3
4
5
A
B
C
D
E
F
G
H

- Refer to page 10-28, 10-29 for Printed Wiring Board


IC3404
MB81G163222-80
FRAME MEMORY
IC3403
IP90C63
MEMORY CONTROLLER
IC3408
74LCX157MTCX SW
IC3407
74LCX157MTCX SW
IC3410
74LCX574MTCX
BUFF
RB3404
22×4
RB3403
22×4
R3406
R3405
C3406
C3420
C3405
C3419
C3421
C3422
C3408
C3407
C3412
C3411
C3414
0.1
25V
B:CHIP
D 3.3V
D+3.3V
C63RST (P4)
SM-DATA-R (P1)
SM-CLK-R (P1)
SM-CS-R (P1)
POCLKR (P11)
POFLDR (P11)
POHSR (P11)
POVSR (P11)
SMGFLD (P4)
SMGHS (P4)
SMGVS (P4)
SMGCLK (P3)
GMUXR (P11)
SMG3D (P3)
SMG1D (P3)
B MCLKR (P11)
(P12) G130
(P11) MUXCLKR
D13D8
D13D7
D13D6
D13D5
D13D4
D13D3
D13D2
D13D1
D13D0
G1307
G1306
G1305
G1304
G1303
G1302
G1301
G1300
BB (8/18)
(FRAME MEMORY, MEMORY CONT.)

B-SS1647<08. >-BB. -P8

1
2
3
4
5

• Refer to page 10-28, 10-29 for Printed Wiring Board

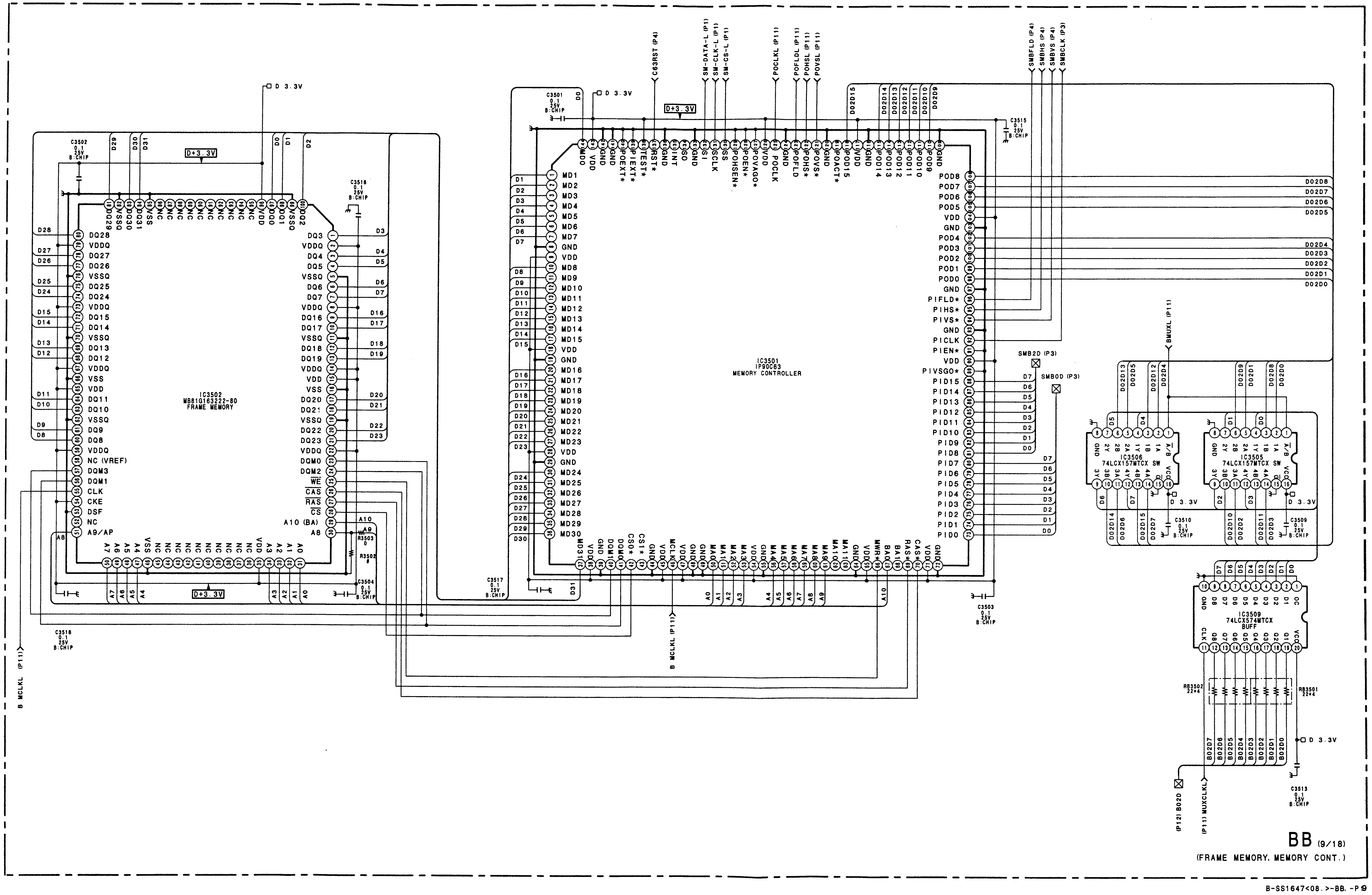
1

2

3

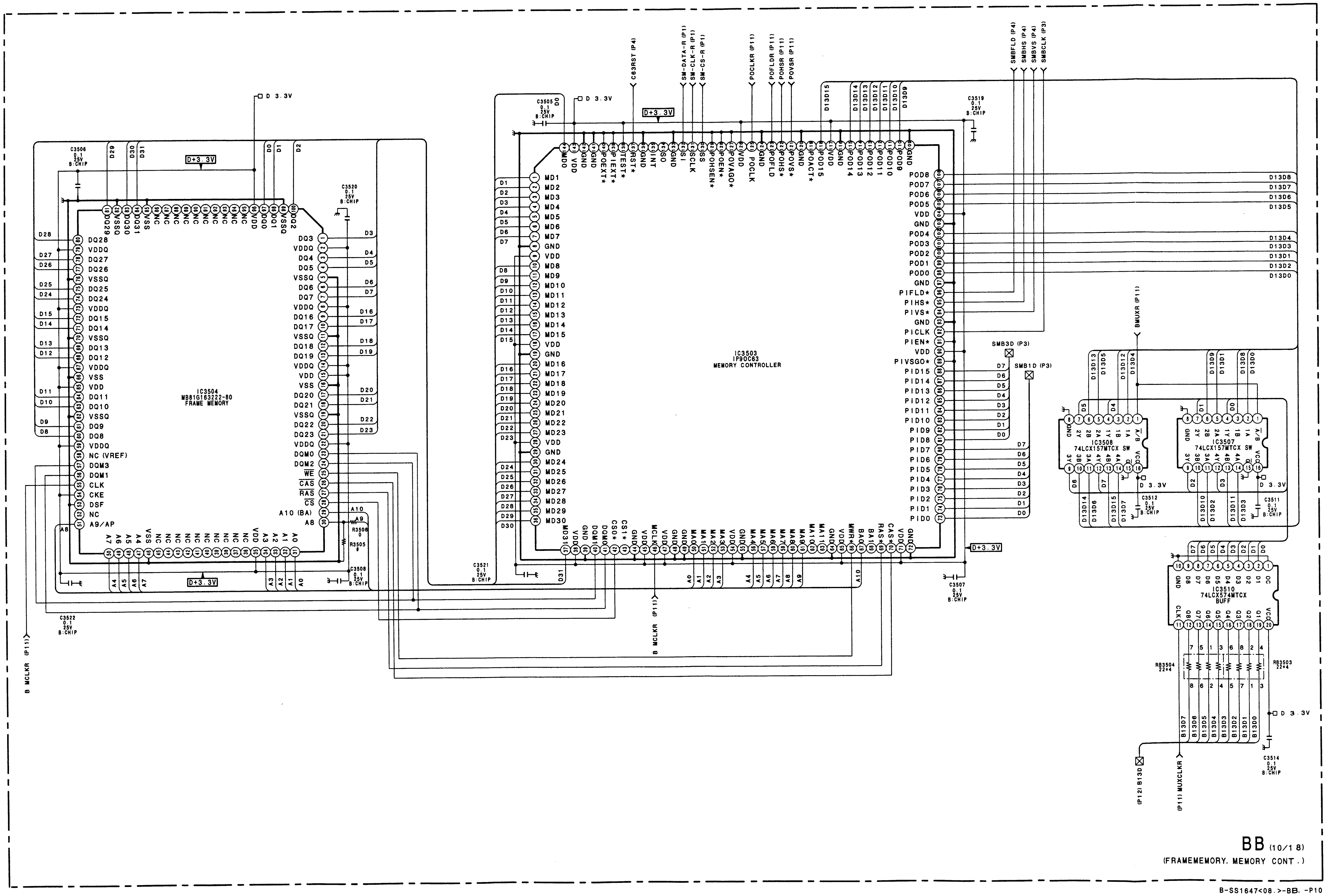
4

5

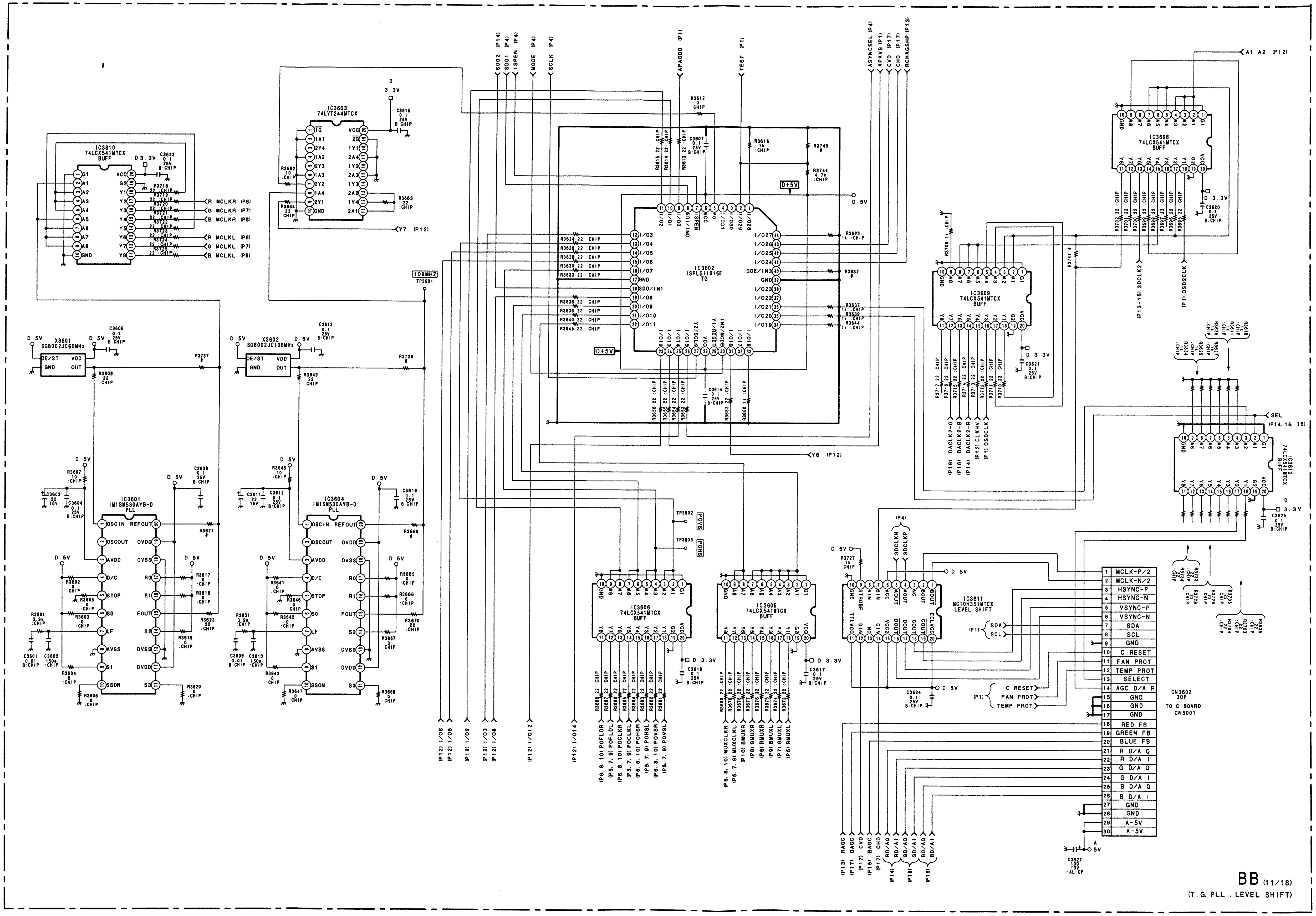

IC3502
MB81G163222-80
FRAME MEMORY
IC3501
IP90C63
MEMORY CONTROLLER
IC3506
74LCX157MTCX SW
IC3505
74LCX157MTCX SW
IC3509
74LCX574MTCX
BUFF
RB3502 22*4
RB3501 22*4
C3502 0.1 25V B:CHIP
C3516 0.1 25V B:CHIP
C3501 0.1 25V B:CHIP
C3515 0.1 25V B:CHIP
C3517 0.1 25V B:CHIP
C3503 0.1 25V B:CHIP
C3504 0.1 25V B:CHIP
C3518 0.1 25V B:CHIP
C3510 0.1 25V B:CHIP
C3509 0.1 25V B:CHIP
C3513 0.1 25V B:CHIP
R3503 0
R3502 0
D 3.3V
D+3.3V
C63RST (P4)
SM-DATA-L (P1)
SM-CLK-L (P1)
SM-CS-L (P1)
POCLKL (P11)
POFLDL (P11)
POHSL (P11)
POVSL (P11)
SMBFLD (P4)
SMBHS (P4)
SMBVS (P4)
SMBCLK (P3)
SMB2D (P3)
SMB0D (P3)
BMUXL (P11)
B MCLKL (P11)
B MCLKL (P11)
(P12) B02D
(P11) MUXCLKL
BB (9/18)
(FRAME MEMORY, MEMORY CONT.)
B-SS1647<08.>-BB.-P9

A B C D E F G H

• Refer to page 10-28, 10-29 for Printed Wiring Board


C3506 0.1 25V B:CHIP
IC3504
MB81G163222-80
FRAME MEMORY
D+3.3V
D 3.3V
C3520 0.1 25V B:CHIP
C3522 0.1 25V B:CHIP
R3505 0
R3506 0
C3508 0.1 25V B:CHIP
B MCLKR (P11)
C3505 0.1 25V B:CHIP
CB3RST (P4)
SM-DATA-R (P1)
SM-CLK-R (P1)
SM-CS-R (P1)
POCLKR (P11)
POFLDR (P11)
POHSR (P11)
POVSR (P11)
C3519 0.1 25V B:CHIP
SMBFLD (P4)
SMBHS (P4)
SMBVS (P4)
SMBCLK (P3)
IC3503
IP90C63
MEMORY CONTROLLER
C3521 0.1 25V B:CHIP
C3507 0.1 25V B:CHIP
B MCLKR (P11)
SMB3D (P3)
SMB1D (P3)
BMUXR (P11)
IC3508
74LCX157MTCX SW
IC3507
74LCX157MTCX SW
C3512 0.1 25V B:CHIP
C3511 0.1 25V B:CHIP
IC3510
74LCX574MTCX
BUFF
RB3504 22×4
RB3503 22×4
C3514 0.1 25V B:CHIP
(P12) B13D
(P11) MUXCLKR
BB (10/18)
(FRAMEMEMORY, MEMORY CONT.)
B-SS1647<08.>-BB.-P10
1
2
3
4
5

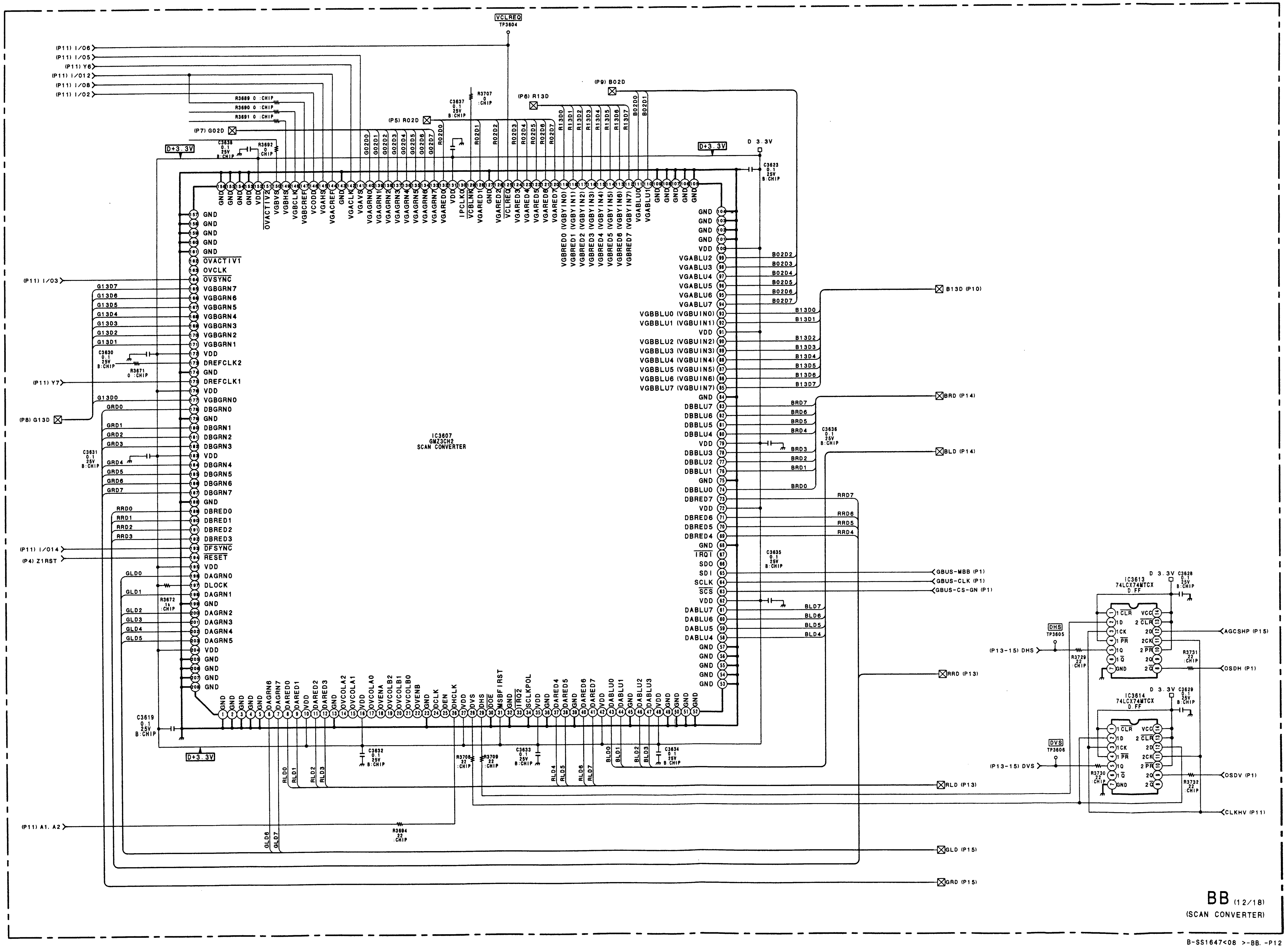
- Refer to page 10-28, 10-29 for Printed Wiring Board


IC3610 74LCX541MTCX BUFF
IC3603 74LVT244MTCX
IC3602 ISPLSI1016E TG
IC3608 74LCX541MTCX BUFF
IC3609 74LCX541MTCX BUFF
IC3612 74LCX541MTCX BUFF
X3601 SG8002JC60MHz
X3602 SG8002JC108MHz
108MHZ TP3601
IC3601 IM1SM530AYB-D PLL
IC3604 IM1SM530AYB-D PLL
IC3606 74LCX541MTCX BUFF
IC3605 74LCX541MTCX BUFF
IC3611 MC10H351MTCX LEVEL SHIFT
D+5V
D 3.3V
D 5V
R MCLKR (P6)
G MCLKR (P7)
B MCLKR (P8)
R MCLKL (P6)
G MCLKL (P7)
B MCLKL (P8)
Y7 (P12)
Y6 (P12)
SDO2 (P14)
SDO1 (P4)
ISPEN (P4)
MODE (P4)
SCLK (P4)
APAODD (P1)
TEST (P1)
ASYNCSEL (P4)
APAVS (P1)
CVD (P17)
CHD (P17)
RCHAGSHP (P13)
A1, A2 (P12)
SEL (P14, 16, 18)
(P13-15) 3DCLK2
(P11) OSD2CLK
(P18) DACLK2-G
(P16) DACLK2-B
(P14) DACLK2-R
(P12) CLKHV
(P11) OSDCLK
TP3602 PDVS
TP3603 PDHS
3DCLKN
3DCLKP
(P1) SDA SCL
(P1) C RESET FAN PROT TEMP PROT
1 MCLK-P/2
2 MCLK-N/2
3 HSYNC-P
4 HSYNC-N
5 VSYNC-P
6 VSYNC-N
7 SDA
8 SCL
9 GND
10 C RESET
11 FAN PROT
12 TEMP PROT
13 SELECT
14 AGC D/A R
15 GND
16 GND
17 GND
18 RED FB
19 GREEN FB
20 BLUE FB
21 R D/A Q
22 R D/A I
23 G D/A Q
24 G D/A I
25 B D/A Q
26 B D/A I
27 GND
28 GND
29 A-5V
30 A-5V
CN3602 30P TO C BOARD CN5001
(P12) I/O6
(P12) I/O5
(P12) I/O2
(P12) I/O3
(P12) I/O8
(P12) I/O12
(P12) I/O14
(P6, 8, 10) POFLDR
(P5, 7, 9) POFLDL
(P6, 8, 10) POCLKR
(P5, 7, 9) POCLKL
(P6, 8, 10) POHSR
(P5, 7, 9) POHSL
(P6, 8, 10) POVSR
(P5, 7, 9) POVSL
(P6, 8, 10) MUXCLKR
(P5, 7, 9) MUXCLKL
(P10) BMUXR
(P8) GMUXR
(P6) RMUXR
(P9) BMUXL
(P7) GMUXL
(P5) RMUXL
(P13) RAGC
(P17) GAGC
(P17) CVD
(P15) BAGC
(P17) CHD
(P14) RD/AQ
(P14) RD/AI
(P18) GD/AQ
(P18) GD/AI
(P16) BD/AQ
(P16) BD/AI
C3627 100 10V AL-CP
BB (11/18)
(T.G. PLL., LEVEL SHIFT)
B-SS1647<08.>-BB. —P11

1 2 3 4 5

A B C D E F G H

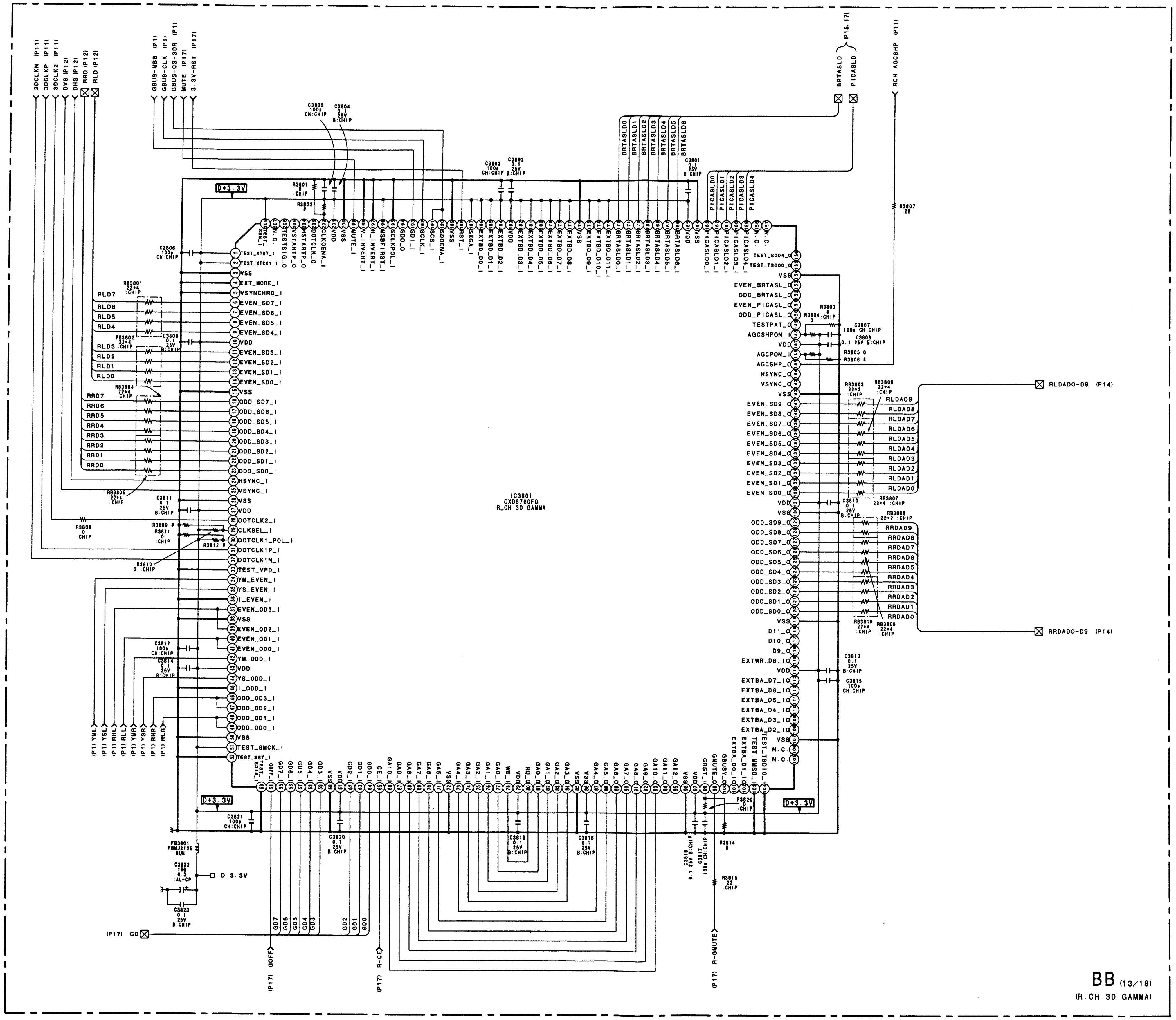
- Refer to page 10-28, 10-29 for Printed Wiring Board


VCLREQ
TP3604
IC3607
GMZ3CH2
SCAN CONVERTER
IC3613
74LCX74MTCX
D.FF
IC3614
74LCX74MTCX
D.FF
(P11) I/O6
(P11) I/O5
(P11) Y6
(P11) I/O12
(P11) I/O8
(P11) I/O2
(P7) GO2D
(P5) RO2D
(P6) R13D
(P9) BO2D
(P11) I/O3
(P11) Y7
(P8) G13D
(P11) I/O14
(P4) Z1RST
(P11) A1, A2
B13D (P10)
BRD (P14)
BLD (P14)
GBUS-MBB (P1)
GBUS-CLK (P1)
GBUS-CS-GN (P1)
RRD (P13)
RLD (P13)
GLD (P15)
GRD (P15)
DHS
TP3605
(P13-15) DHS
DVS
TP3606
(P13-15) DVS
AGCSHP (P15)
OSDH (P1)
OSDV (P1)
CLKHV (P11)
D+3.3V
D 3.3V
BB (12/18)
(SCAN CONVERTER)
B-SS1647<08 >-BB.-P12

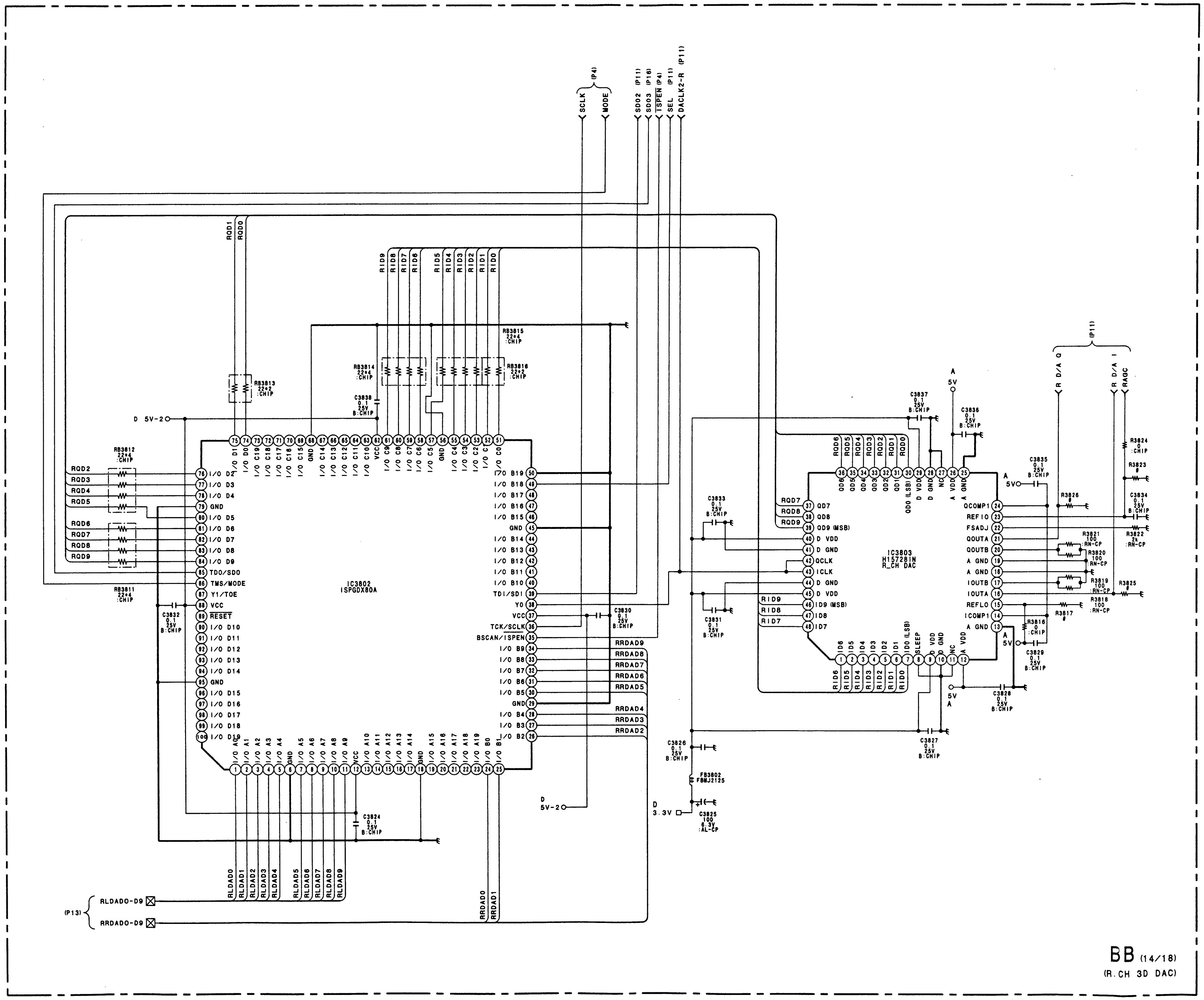
1
2
3
4
5

A | B | C | D | E | F | G | H

• Refer to page 10-28, 10-29 for Printed Wiring Board


3DCLKN (P11)
3DCLKP (P11)
3DCLK2 (P11)
DVS (P12)
DHS (P12)
RRD (P12)
RLD (P12)
GBUS-MBB (P11)
GBUS-CLK (P11)
GBUS-CS-3DR (P11)
MUTE (P17)
3.3V-RST (P17)
BRTASLD (P15,17)
PICASLD
RCH AGCSHP (P11)
D+3.3V
IC3801
CXD8760FQ
R_CH 3D GAMMA
RLDAD0-D9 (P14)
RRDAD0-D9 (P14)
(P1) YML
(P1) YSL
(P1) RHL
(P1) RLL
(P1) YMR
(P1) YSR
(P1) RHR
(P1) RLR
(P17) GD
D 3.3V
(P17) GOFF
(P17) R-CE
(P17) R-GMUTE
FB3801
C3822
C3823
BB (13/18)
(R.CH 3D GAMMA)
B-SS1647<08.>-BB.-P13

- Refer to page 10-28, 10-29 for Printed Wiring Board

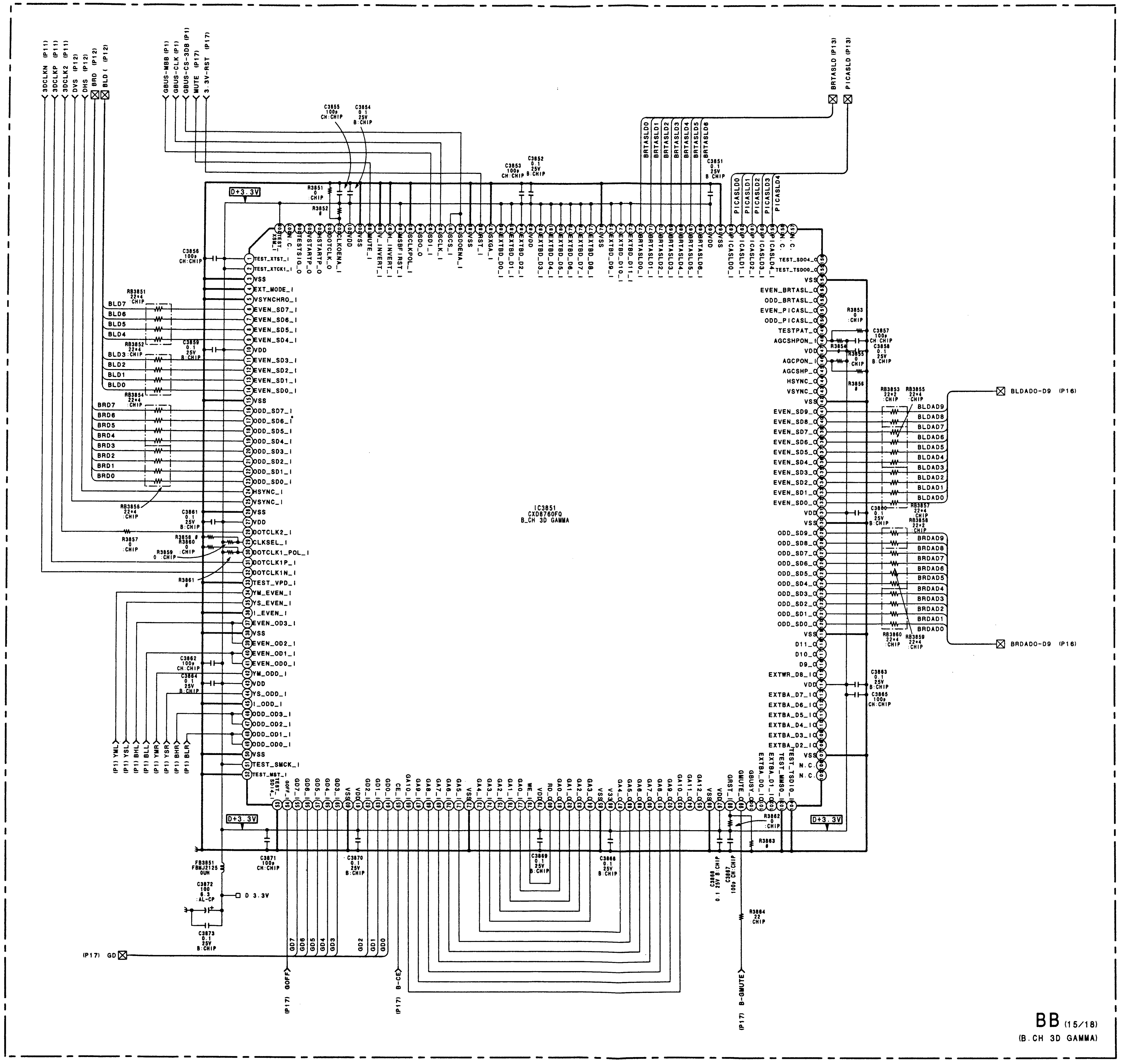

IC3802
ISPGDX80A
IC3803
H157281N
R_CH DAC
SCLK
MODE
(P4)
SDO2 (P11)
SDO3 (P16)
ISPEN (P4)
SEL (P11)
DACLK2-R (P11)
D 5V-2
D 3.3V
R D/A Q
R D/A I
RAGC
(P11)
RLDADO-D9
RRDADO-D9
(P13)
RRDAD9
RRDAD8
RRDAD7
RRDAD6
RRDAD5
RRDAD4
RRDAD3
RRDAD2
RRDAD0
RRDAD1
RLDAD0
RLDAD1
RLDAD2
RLDAD3
RLDAD4
RLDAD5
RLDAD6
RLDAD7
RLDAD8
RLDAD9
RQD0
RQD1
RQD2
RQD3
RQD4
RQD5
RQD6
RQD7
RQD8
RQD9
RID0
RID1
RID2
RID3
RID4
RID5
RID6
RID7
RID8
RID9
RB3811
RB3812
RB3813
RB3814
RB3815
RB3816
FB3802
BB (14/18)
(R.CH 3D DAC)

B-SS1647<08.>-BB.-P14

1
2
3
4
5

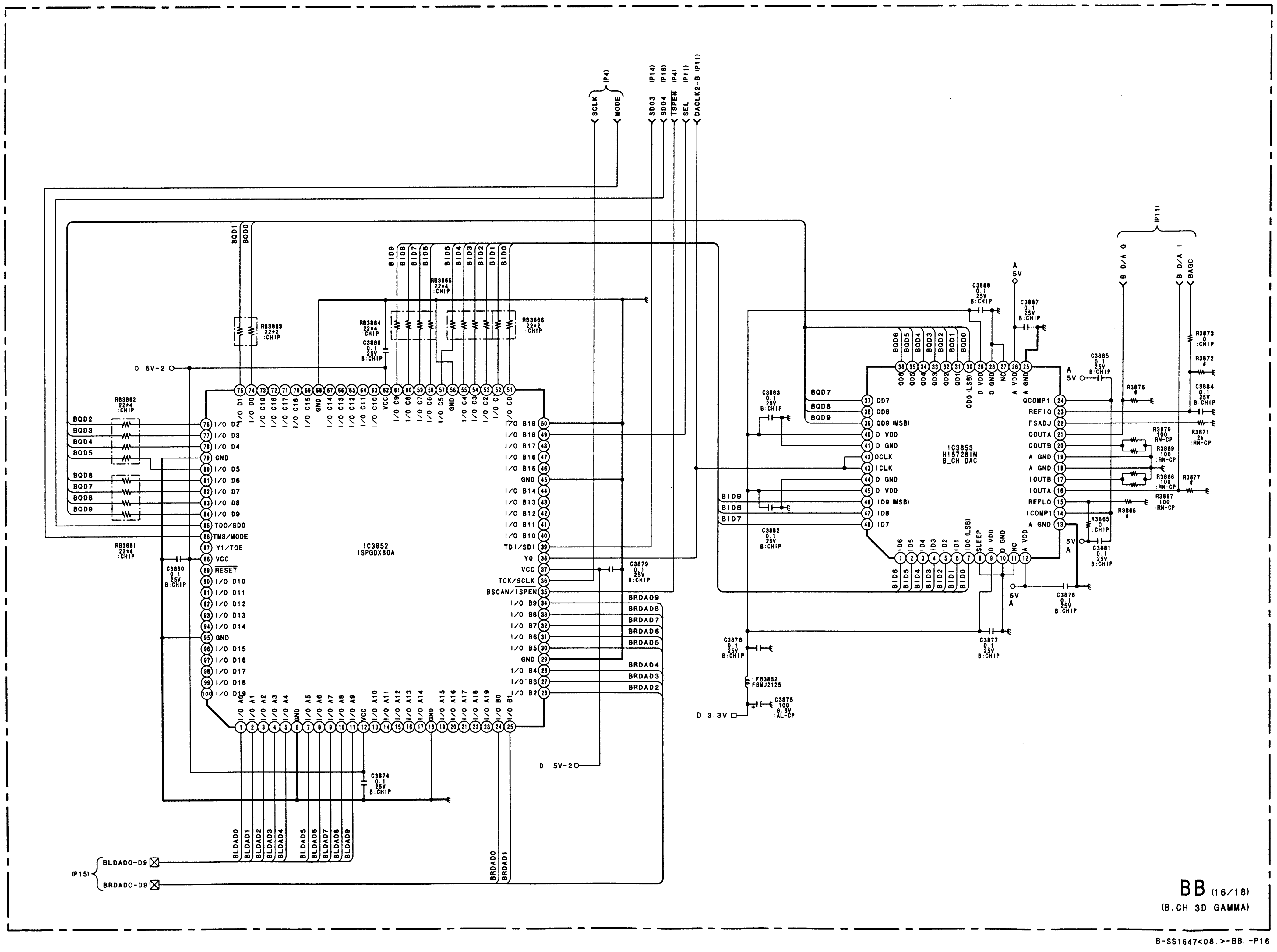
A | B | C | D | E | F | G | H

- Refer to page 10-28, 10-29 for Printed Wiring Board

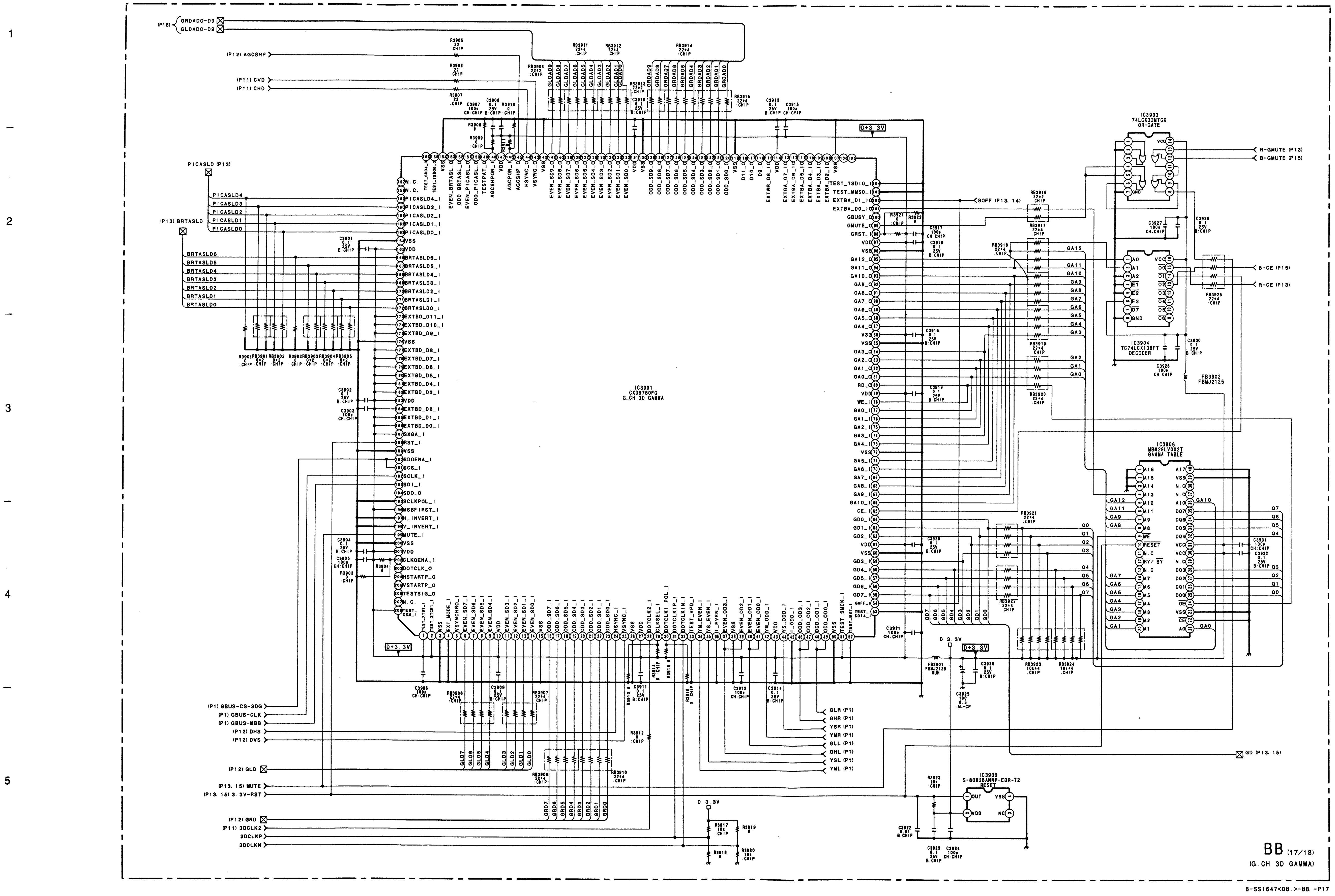

IC3851
CXD8760FQ
B_CH 3D GAMMA
3DCLKN (P11)
3DCLKP (P11)
3DCLK2 (P11)
DVS (P12)
DHS (P12)
BRD (P12)
BLD I (P12)
GBUS-MBB (P1)
GBUS-CLK (P1)
GBUS-CS-3DB (P1)
MUTE (P17)
3.3V-RST (P17)
BRTASLD (P13)
PICASLD (P13)
BLDAD0-D9 (P16)
BRDAD0-D9 (P16)
D+3.3V
D 3.3V
(P17) GD
(P17) GOFF
(P17) B-CE
(P17) B-GMUTE
(P11) YML
(P11) YSL
(P11) BHL
(P11) BLL
(P11) YMR
(P11) YSR
(P11) BHR
(P11) BLR
FB3851 FBMJ2125 0UH
BB (15/18)
(B.CH 3D GAMMA)

B-SS1647<08.>-BB.-P15

• Refer to page 10-28, 10-29 for Printed Wiring Board


IC3852
ISPGDX80A
IC3853
HI5728IN
B_CH DAC
SCLK
MODE
SDO3
SDO4
TSPEN
SEL
DACLK2-B
B D/A Q
B D/A I
BAGC
D 5V-2
D 3.3V
BLDAD0-D9
BRDAD0-D9
(P15)
BB (16/18)
(B.CH 3D GAMMA)
B-SS1647<08.>-BB.-P16

- Refer to page 10-28, 10-29 for Printed Wiring Board

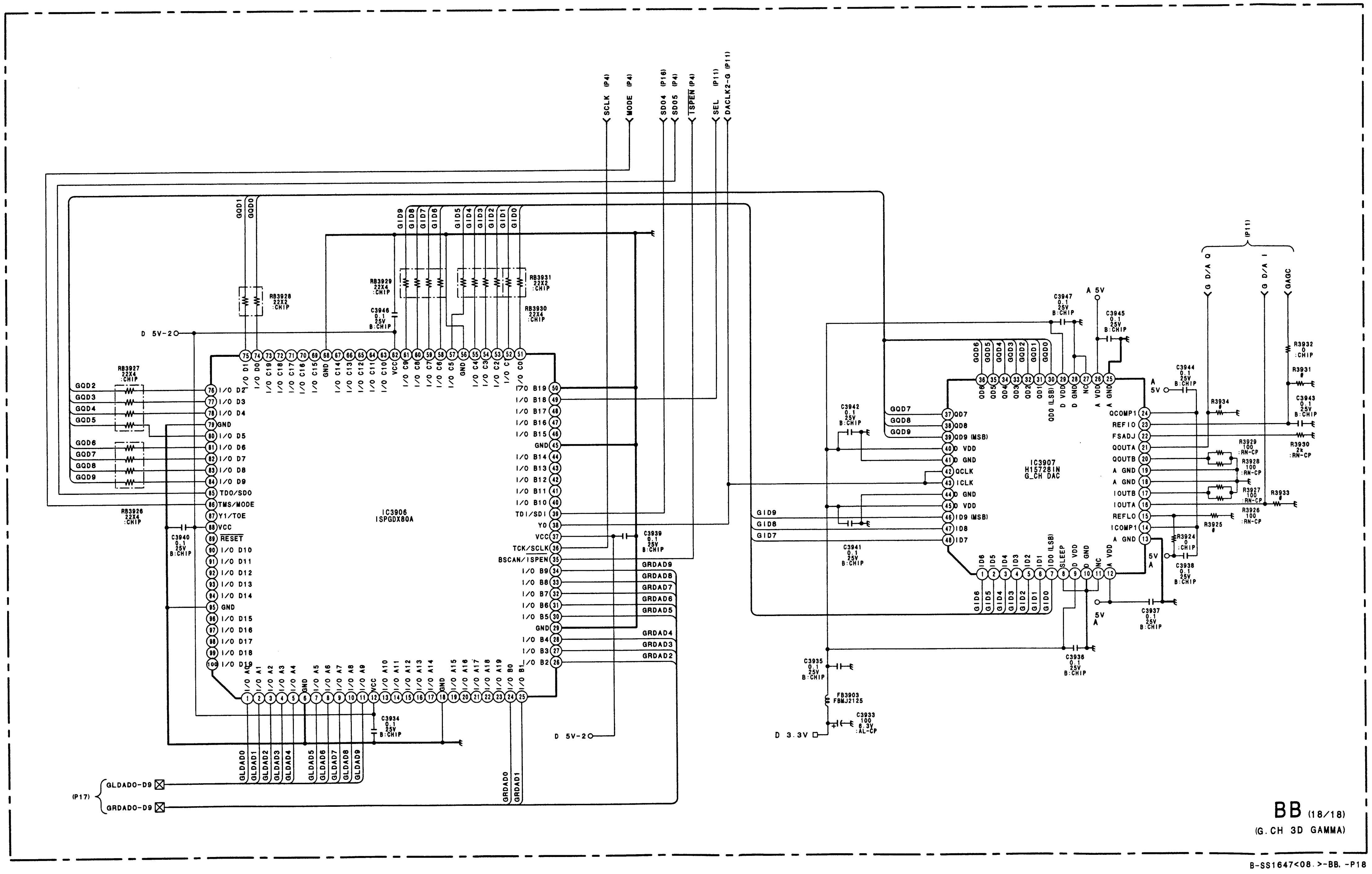

1
2
3
4
5
IC3901
CXD8760FQ
G_CH 3D GAMMA
IC3903
74LCX32MTCX
GR-GATE
IC3904
TC74LCX138FT
DECODER
IC3906
MBM29LV002T
GAMMA TABLE
IC3902
S-80828ANNP-EDR-T2
RESET
(P18) GRDAD0-D9
GLDAD0-D9
(P12) AGCSHP
(P11) CVD
(P11) CHD
PICASLD (P13)
(P13) BRTASLD
D+3.3V
R-GMUTE (P13)
B-GMUTE (P15)
GOFF (P13, 14)
B-CE (P15)
R-CE (P13)
FB3902
FBMJ2125
FB3901
FBMJ2125
GD (P13, 15)
(P1) GBUS-CS-3DG
(P1) GBUS-CLK
(P1) GBUS-MBB
(P12) DHS
(P12) DVS
(P12) GLD
(P13, 15) MUTE
(P13, 15) 3.3V-RST
(P12) GRD
(P11) 3DCLK2
3DCLKP
3DCLKN
GLR (P1)
GHR (P1)
YSR (P1)
YMR (P1)
GLL (P1)
GHL (P1)
YSL (P1)
YML (P1)
D 3.3V
BB (17/18)
(G.CH 3D GAMMA)

B-SS1647<08.>-BB.-P17

A | B | C | D | E | F | G | H

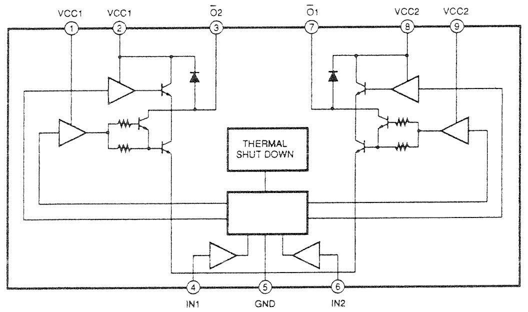
BB (18/18)

- Refer to page 10-28, 10-29 for Printed Wiring Board

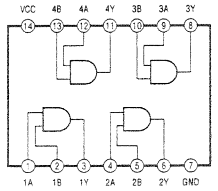

SCLK (P4)
MODE (P4)
SDO4 (P16)
SDO5 (P4)
TSPEN (P4)
SEL (P11)
DACLK2-G (P11)
D 5V-2
IC3906
ISPGDX80A
IC3907
HI5728IN
G_CH DAC
RB3926
RB3927
RB3928
RB3929
RB3930
RB3931
C3939
C3940
C3934
C3935
C3936
C3937
C3938
C3941
C3942
C3943
C3944
C3945
C3946
C3947
C3933
FB3903
FBMJ2125
D 3.3V
A 5V
(P11)
G D/A O
G D/A I
GAGC
R3924
R3925
R3926
R3927
R3928
R3929
R3930
R3931
R3932
R3933
R3934
GLDAD0-D9
GRDAD0-D9
(P17)
BB (18/18)
(G.CH 3D GAMMA)
B-SS1647<08.>-BB.-P18

BC Board IC Block Diagrams

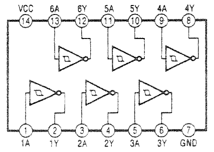
M54544AL (IC4306 – 4308)


VCC1
VCC1
$\overline{O}2$
$\overline{O}1$
VCC2
VCC2
THERMAL SHUT DOWN
IN1
GND
IN2

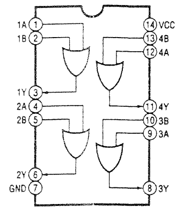
PC74HC08D-T (IC4305)


VCC
4B
4A
4Y
3B
3A
3Y
1A
1B
1Y
2A
2B
2Y
GND

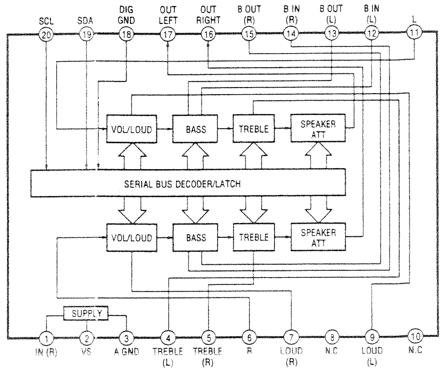
PC74HC14D-T (IC4304)

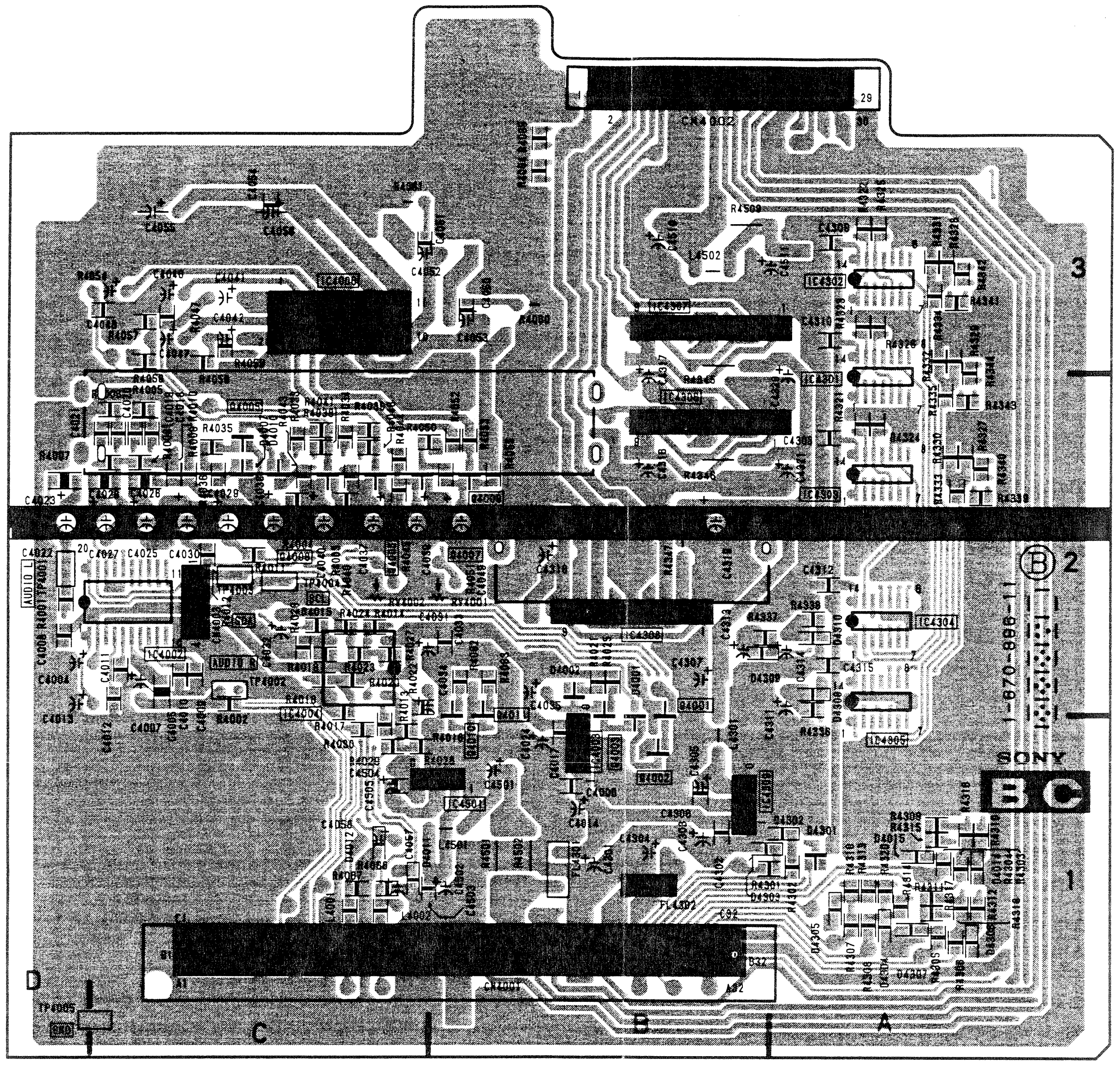

VCC
6A
6Y
5A
5Y
4A
4Y
1A
1Y
2A
2Y
3A
3Y
GND

PC74HC32D-T (IC4301 – 4303)


1A
1B
1Y
2A
2B
2Y
GND
VCC
4B
4A
4Y
3B
3A
3Y

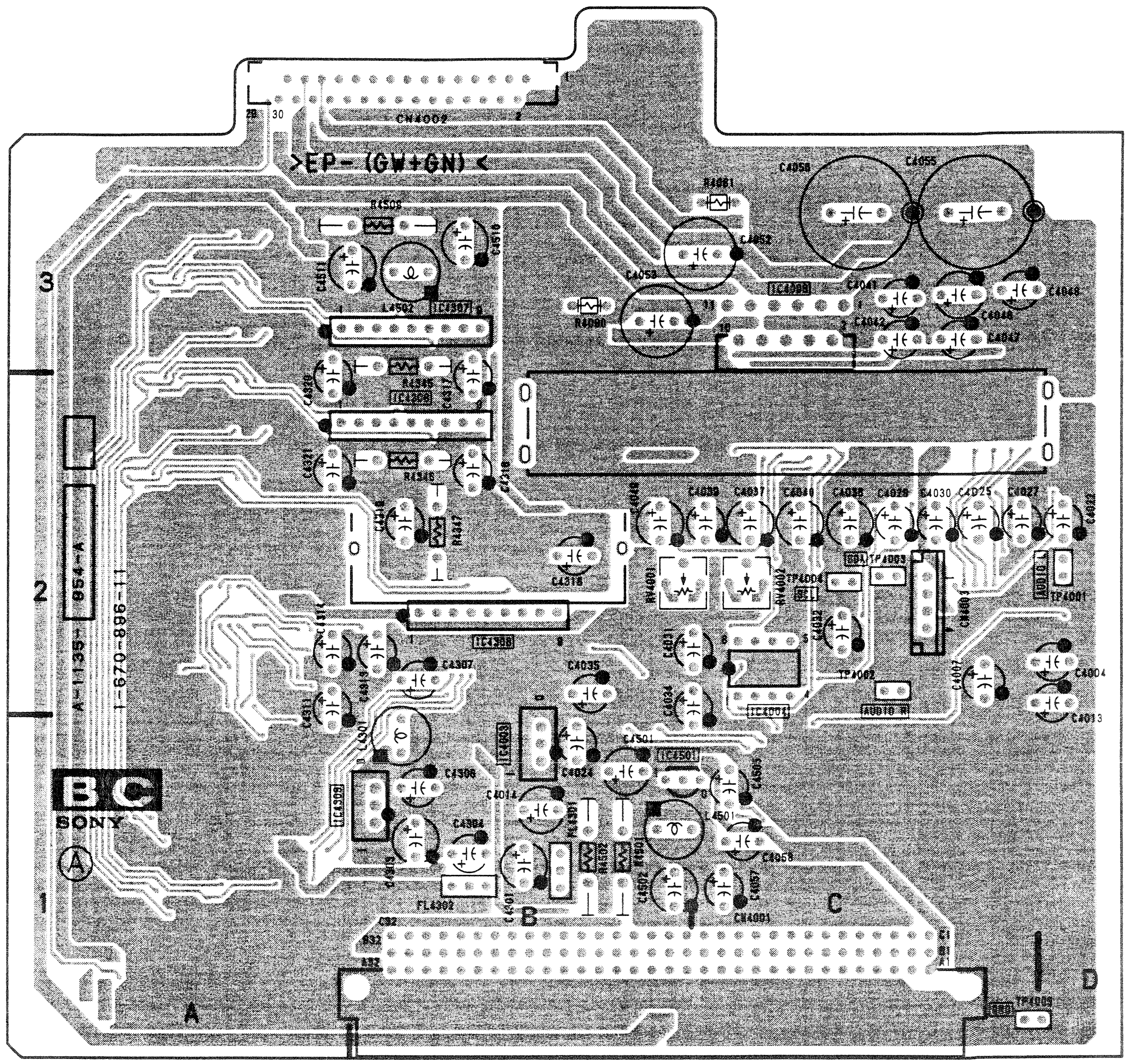
TDA7315D013TR (IC4002)


SCL
SDA
DIG GND
OUT LEFT
OUT RIGHT
B OUT (R)
B IN (R)
B OUT (L)
B IN (L)
L
VOL/LOUD
BASS
TREBLE
SPEAKER ATT
SERIAL BUS DECODER/LATCH
VOL/LOUD
BASS
TREBLE
SPEAKER ATT
SUPPLY
IN (R)
VS
A GND
TREBLE (L)
TREBLE (R)
R
LOUD (R)
N.C
LOUD (L)
N.C


CN4002
CN4001
1-670-896-11
SONY
BC
TP4005
A
B
C
D
1
2
3

BC – B SIDE –

SUFFIX ; -11


CN4002
>EP- (GW+GN) <
CN4001
A-1135-854-A
1-670-896-11
BC
SONY
FL4302
TP4005
A
B
C
D
1
2
3

BC – A SIDE –

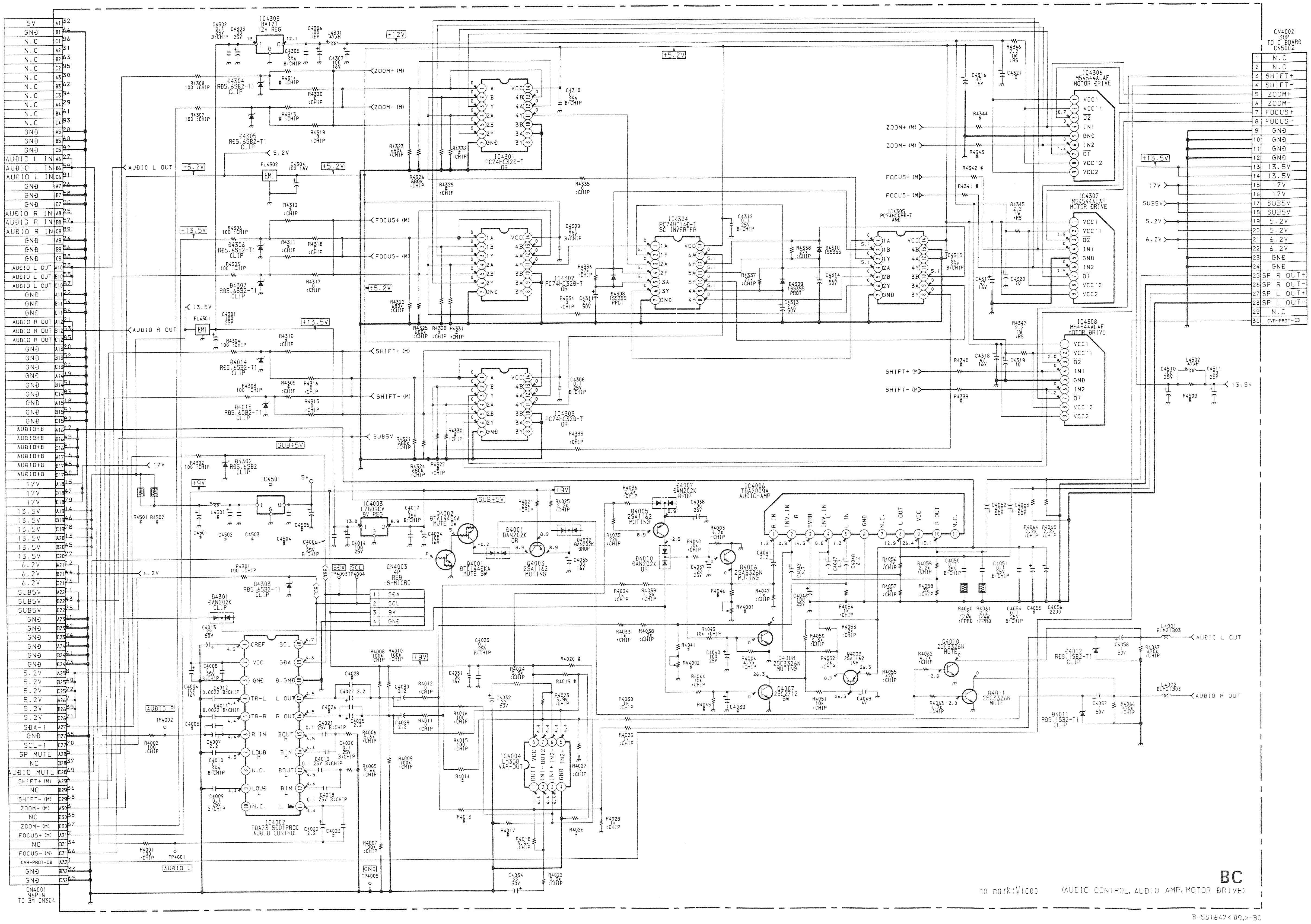
SUFFIX ; -11

—
BC
—
1-670-896-11

D4001	* C-3
D4002	* C-3
D4007	* B-1
D4010	* B-1
D4011	* D-2
D4012	* D-2
D4014	* D-5
D4015	* D-4
D4301	* D-4
D4302	* D-4
D4303	* D-4
D4304	* D-4
D4305	* D-4
D4306	* D-5
D4307	* D-4
D4308	* C-4
D4309	* C-4
D4310	* C-4
IC4003	* D-3
IC4004	* C-2
IC4006	* B-2
IC4301	* B-4
IC4302	* B-4
IC4303	* B-4
IC4304	* C-4
IC4305	* C-4
IC4306	* B-3
IC4307	* B-3
IC4308	* C-3
IC4309	* D-4
Q4001	* C-3
Q4002	* D-3
Q4003	* C-3
Q4005	* B-1
Q4006	* C-2
Q4007	* C-2
Q4008	* C-2
Q4009	* C-2
Q4010	* C-2
Q4011	* C-2
TP4001	* C-1
TP4002	* C-1
TP4003	* C-1
TP4004	* C-2
TP4005	* D-1

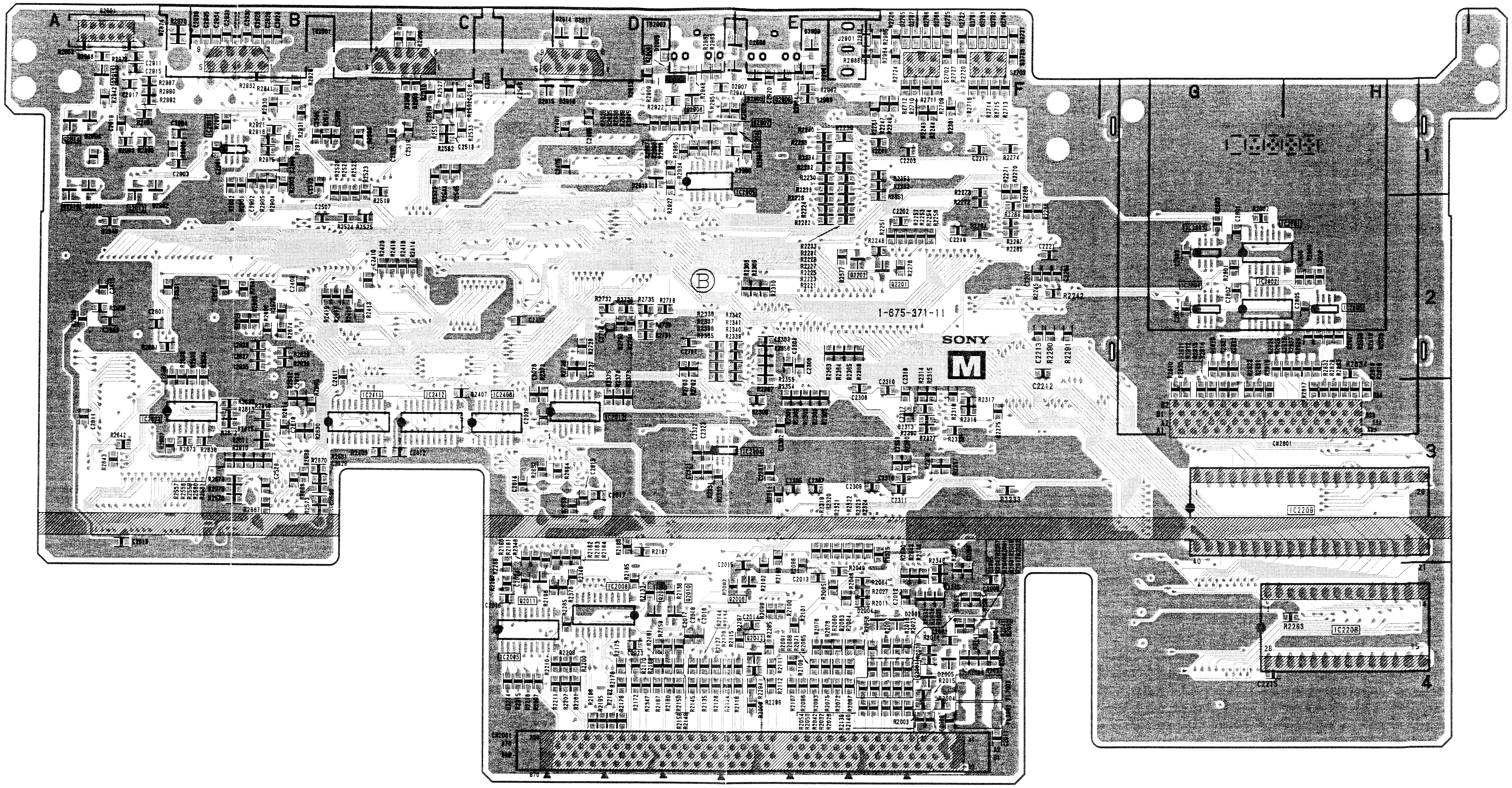
* : B Side mount

- Refer to page 10-50 for Printed Wiring Board
- Refer to page 10-49 for IC Block Diagrams


CN4001
96PIN
TO BM CN304
CN4002
30P
TO C BOARD
CN5002
IC4309
BA12T
12V REG
IC4301
PC74HC32B-T
OR
IC4302
PC74HC32B-T
OR
IC4303
PC74HC32B-T
OR
IC4304
PC74HC14B-T
SC INVERTER
IC4305
PC74HC08B-T
AND
IC4306
M54544ALAF
MOTOR DRIVE
IC4307
M54544ALAF
MOTOR DRIVE
IC4308
M54544ALAF
MOTOR DRIVE
IC4501
IC4003
L78O9CV
9V REG
IC4002
TDA7315D013PRDC
AUDIO CONTROL
IC4004
LM358
VAR-OUT
IC4006
TDA2009A
AUDIO-AMP
CN4003
4P
RED
S-MICRO
ZOOM+ (M)
ZOOM- (M)
FOCUS+ (M)
FOCUS- (M)
SHIFT+ (M)
SHIFT- (M)
SUB5V
AUDIO L OUT
AUDIO R OUT
13.5V
17V
6.2V
5.2V
+12V
+5.2V
+13.5V
SUB+5V
+9V
AUDIO L
AUDIO R
GND
BC
no mark:Video
(AUDIO CONTROL, AUDIO AMP, MOTOR DRIVE)
B-551647<09>-BC

A | B | C | D | E | F | G | H

M M

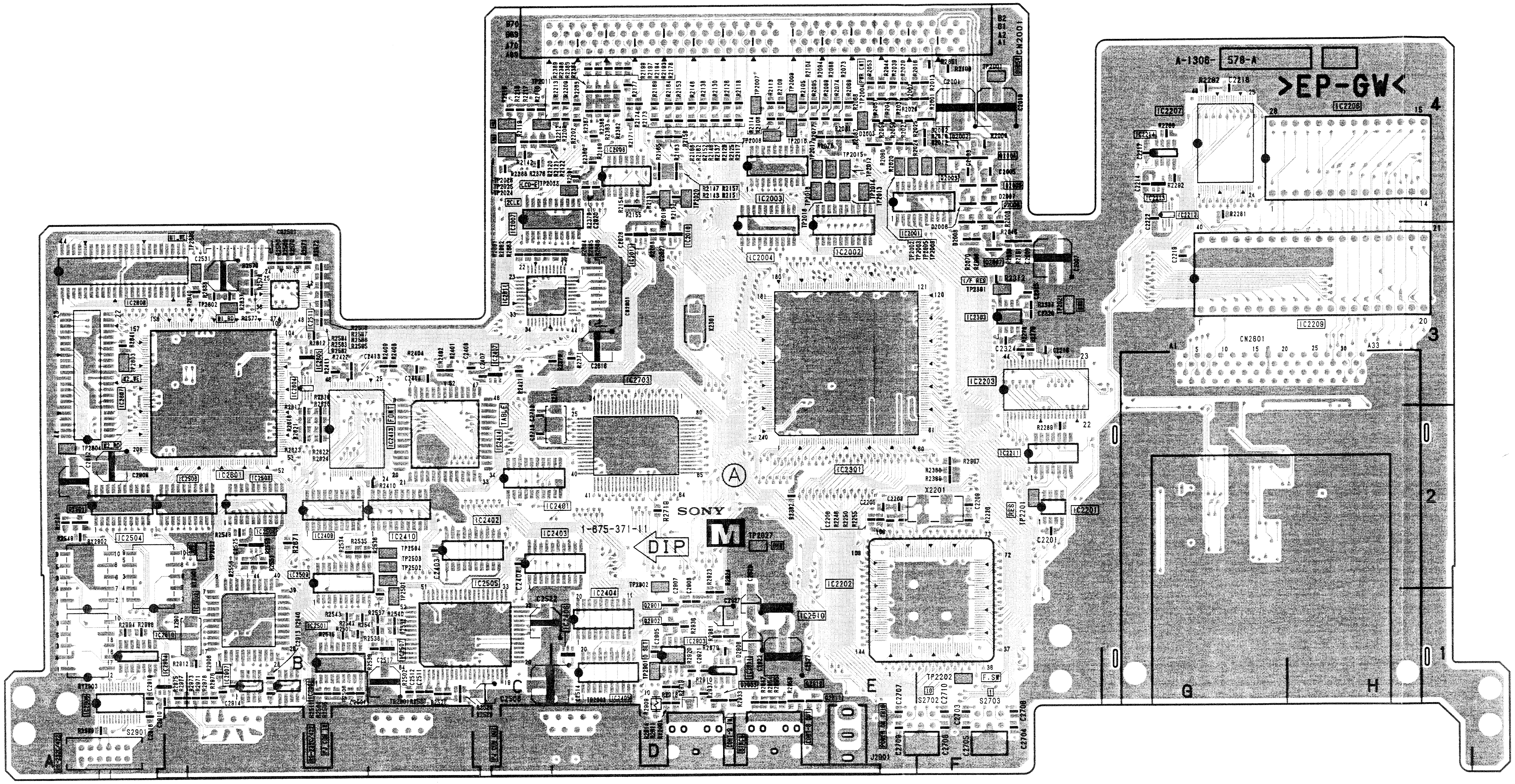


M – B SIDE –

SUFFIX ;-11

–
M
–
1-675-371-11

IC2001	E-3
IC2002	E-3
IC2003	E-4
IC2004	E-3
IC2006	D-4
IC2007	C-4
IC2010	D-3
IC2011	D-3
IC2201	F-2
IC2202	E-2
IC2203	F-3
IC2206	H-4
IC2207	G-4
IC2209	H-3
IC2211	F-2
IC2212	G-4
IC2213	G-4
IC2214	G-4
IC2301	E-2
IC2303	F-3
IC2401	D-2
IC2402	C-2
IC2403	D-2
IC2404	D-1
IC2405	D-1
IC2406	D-1
IC2407	C-3
IC2409	B-2
IC2410	C-2
IC2413	C-2
IC2414	C-2
IC2501	B-1
IC2503	B-2
IC2504	A-2
IC2505	C-2
IC2506	B-2
IC2507	C-1
IC2508	B-2
IC2509	B-2
IC2510	E-1
IC2511	B-3
IC2601	B-2
IC2604	B-3
IC2605	B-3
IC2607	A-3
IC2608	A-3
IC2611	C-3
IC2703	D-3
IC2902	B-1
IC2903	D-1
IC2904	A-1
IC2906	B-1
IC2907	B-1
IC2909	A-1
IC2910	A-1
IC2911	E-1
Q2002	F-4
Q2003	F-4
Q2004	F-4
Q2005	F-4
Q2006	F-4
Q2007	F-3
Q2501	A-2
Q2901	D-1
Q2902	D-2
Q2903	E-1
Q2910	E-1
Q2911	E-1
TP2001	F-4
TP2002	F-3
TP2003	F-3
TP2004	E-4
TP2005	F-3
TP2006	F-3
TP2007	E-4
TP2008	E-4
TP2009	E-4
TP2010	E-4
TP2011	C-4
TP2012	E-4
TP2013	E-4
TP2014	E-4
TP2015	E-4
TP2016	E-4
TP2017	E-4
TP2018	E-4
TP2019	D-4
TP2020	D-4
TP2021	F-3
TP2022	B-2
TP2023	D-4
TP2024	C-4
TP2025	C-4
TP2026	C-4
TP2027	E-2
TP2201	F-2
TP2202	F-1
TP2301	F-3
TP2501	C-2
TP2502	C-2
TP2503	C-2
TP2504	C-2
TP2602	B-3
TP2603	A-3
TP2604	A-2
TP2605	B-3
TP2901	D-1
TP2902	D-2
RV2901	D-1


A-1308-578-A
>EP-GW<
CN2001
CN2801
SONY
1-675-371-11
DIP
M
X2201
J2901
S2901
S2702
S2703
A
B
C
D
E
F
G
H
1
2
3
4

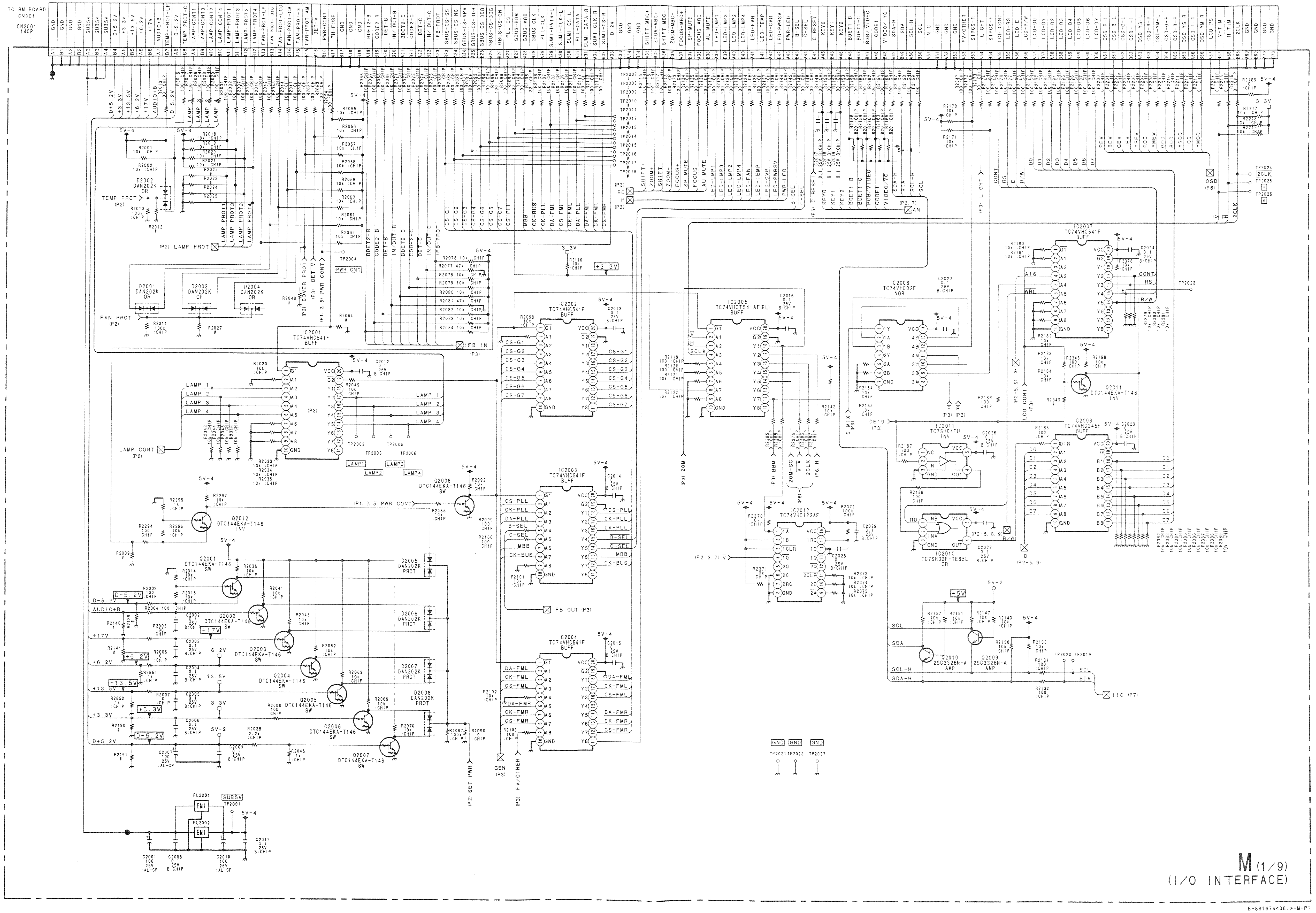
M – A SIDE –

SUFFIX ; -11

—
M
—
1-675-371-11

IC2005	C-5	Q2202	E-2
IC2008	D-4	Q2904	E-1
IC2012	D-3	Q2905	E-1
IC2304	E-3	Q2906	D-1
IC2408	C-3	Q2907	E-1
IC2411	C-3	Q2908	D-1
IC2412	C-3	Q2909	E-1
IC2603	A-3	Q2912	A-2
IC2901	B-1	Q2913	A-2
IC2905	E-1	Q2914	A-1
		Q2915	A-1
Q2001	F-4		
Q2008	E-4		
Q2009	D-4		
Q2010	D-4		
Q2011	C-4		
Q2012	E-4		
Q2201	E-2		

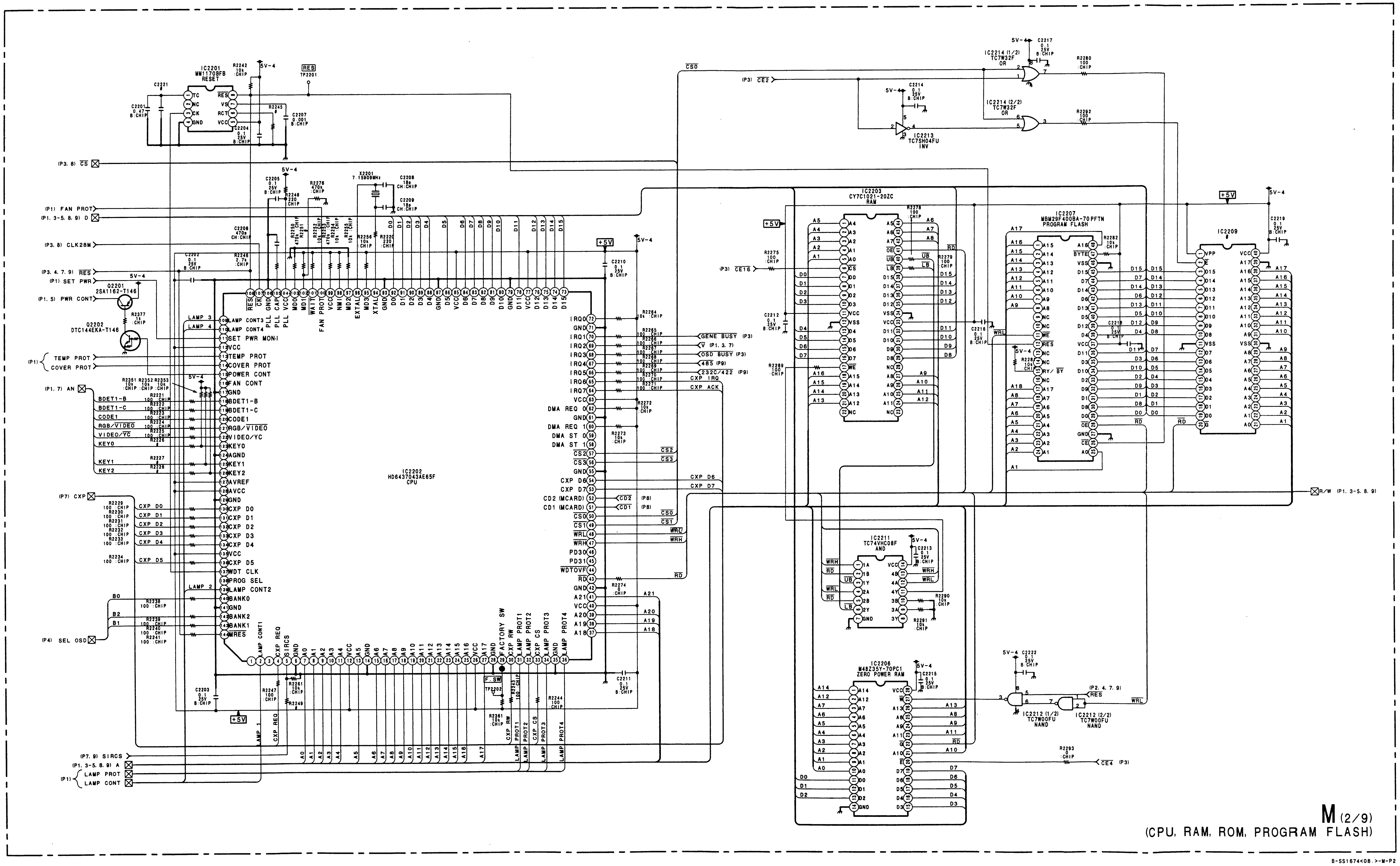
- Refer to page 10-52, 10-53 for Printed Wiring Board
- Refer to page 10-63 for IC Block Diagrams


TO BM BOARD
CN301
CN2001
140P
IC2001
TC74VHC541F
BUFF
IC2002
TC74VHC541F
BUFF
IC2003
TC74VHC541F
BUFF
IC2004
TC74VHC541F
BUFF
IC2005
TC74VHCT541AF(EL)
BUFF
IC2006
TC74VHC02F
NOR
IC2007
TC74VHC541F
BUFF
IC2008
TC74VHC245F
BUFF
IC2010
TC7SH32F-TE85L
OR
IC2011
TC7SH04FU
INV
IC2012
TC74VHC123AF
Q2001
DTC144EKA-T146
SW
Q2002
DTC144EKA-T146
SW
Q2003
DTC144EKA-T146
SW
Q2004
DTC144EKA-T146
SW
Q2005
DTC144EKA-T146
SW
Q2006
DTC144EKA-T146
SW
Q2007
DTC144EKA-T146
SW
Q2008
DTC144EKA-T146
SW
Q2009
2SC3326N-A
AMP
Q2010
2SC3326N-A
AMP
Q2011
DTC144EKA-T146
INV
Q2012
DTC144EKA-T146
INV
D2001
DAN202K
OR
D2002
DAN202K
OR
D2003
DAN202K
OR
D2004
DAN202K
OR
D2005
DAN202K
PROT
D2006
DAN202K
PROT
D2007
DAN202K
PROT
D2008
DAN202K
PROT
FL2001
FL2002
EMI
SUB5V
TP2001
TEMP PROT
(P2)
FAN PROT
(P2)
LAMP PROT
(P2)
LAMP CONT
(P2)
IFB IN
(P3)
IFB OUT (P3)
(P1, 2, 5) PWR CONT
(P2) SET PWR
GEN
(P3)
(P3) FV/OTHER
I I C (P7)
OSD
(P6)
D+5.2V
AUDIO+B
+17V
+6.2V
+13.5V
+3.3V
D+5.2V
5V-4
5V-2
+5V
3.3V
GND
GND
GND
TP2021 TP2022 TP2027
M (1/9)
(I/O INTERFACE)

B-SS1674<08 >-M-P1

A	B	C	D	E	F	G	H

- Refer to page 10-52, 10-53 for Printed Wiring Board
- Refer to page 10-63 for IC Block Diagrams


IC2201 MM1170BFB RESET
IC2202 HD6437043AE65F CPU
IC2203 CY7C1021-20ZC RAM
IC2206 M48Z35Y-70PC1 ZERO POWER RAM
IC2207 MBM29F400BA-70PFTN PROGRAM FLASH
IC2209
IC2211 TC74VHC08F AND
IC2212 (1/2) TC7W00FU NAND
IC2212 (2/2) TC7W00FU NAND
IC2213 TC7SH04FU INV
IC2214 (1/2) TC7W32F OR
IC2214 (2/2) TC7W32F OR
Q2201 2SA1162-T146
Q2202 DTC144EKA-T146
X2201 7.15909MHz
(P3, 8) CS
(P1) FAN PROT
(P1, 3-5, 8, 9) D
(P3, 8) CLK28M
(P3, 4, 7, 9) RES
(P1) SET PWR
(P1, 5) PWR CONT
(P1) TEMP PROT
(P1) COVER PROT
(P1, 7) AN
(P7) CXP
(P4) SEL OSD
(P7, 9) SIRCS
(P1, 3-5, 8, 9) A
(P1) LAMP PROT
(P1) LAMP CONT
(P3) CE2
(P3) CE16
GENE BUSY (P3)
V (P1, 3, 7)
OSD BUSY (P3)
485 (P9)
232C/422 (P9)
CD2 (P8)
CD1 (P8)
R/W (P1, 3-5, 8, 9)
(P2, 4, 7, 9) RES
CE4 (P3)
M (2/9)
(CPU, RAM, ROM, PROGRAM FLASH)
8-SS1674<08.>-M-P2

- Refer to page 10-52, 10-53 for Printed Wiring Board
- Refer to page 10-53 for IC Block Diagrams

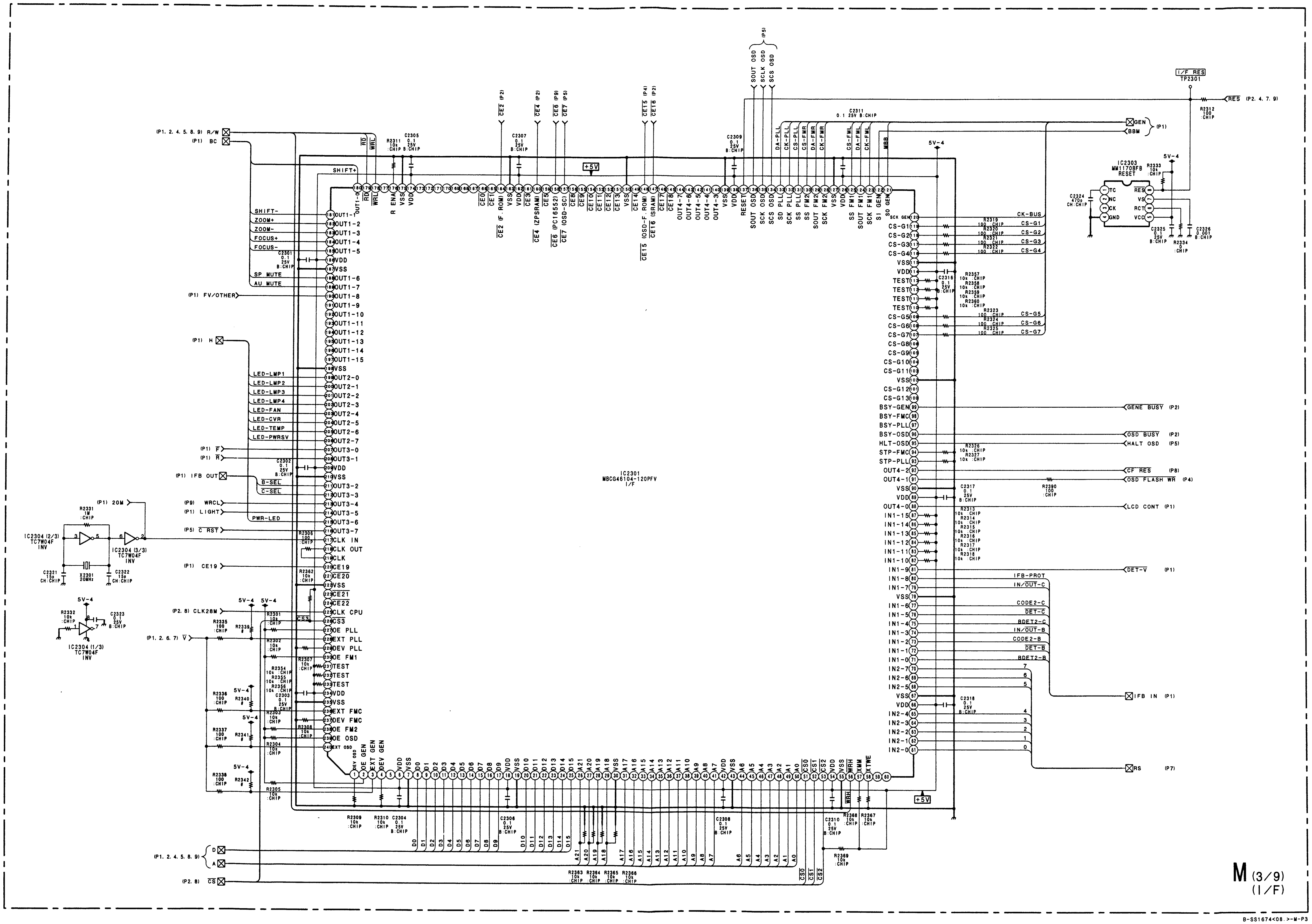
1

2

3

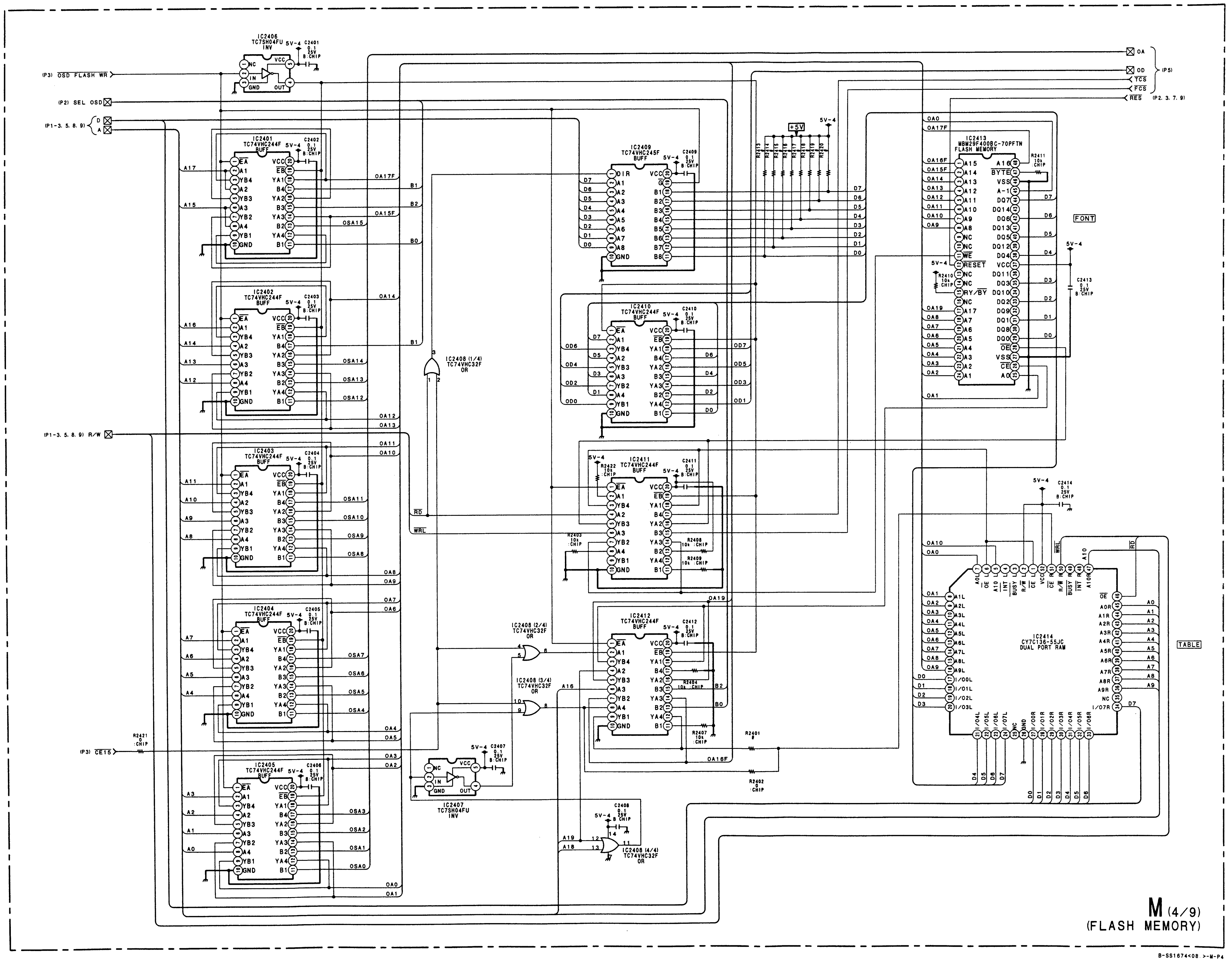
4

5


IC2301
MBCG46104-120PFV
I/F
IC2303
MM1170BFB
RESET
IC2304 (2/3)
TC7W04F
INV
IC2304 (3/3)
TC7W04F
INV
IC2304 (1/3)
TC7W04F
INV
X2301
20MHz
I/F RES
TP2301
RES (P2, 4, 7, 9)
GEN
BBM
(P1)
+5V
5V-4
SHIFT+
SHIFT-
ZOOM+
ZOOM-
FOCUS+
FOCUS-
SP MUTE
AU MUTE
(P1) FV/OTHER
(P1) H
LED-LMP1
LED-LMP2
LED-LMP3
LED-LMP4
LED-FAN
LED-CVR
LED-TEMP
LED-PWRSV
(P1) F
(P1) R
(P1) IFB OUT
B-SEL
C-SEL
(P9) WRCL
(P1) LIGHT
PWR-LED
(P5) C RST
(P1) 20M
(P1) CE19
(P2, 8) CLK28M
(P1, 2, 6, 7) V
(P1, 2, 4, 5, 8, 9) R/W
(P1) BC
(P1, 2, 4, 5, 8, 9) D
A
(P2, 8) CS
CE2 (P2)
CE4 (P2)
CE6 (P9)
CE7 (P5)
CE15 (P4)
CE16 (P2)
SOUT OSD
SCLK OSD
SCS OSD
(P5)
CK-BUS
CS-G1
CS-G2
CS-G3
CS-G4
CS-G5
CS-G6
CS-G7
GENE BUSY (P2)
OSD BUSY (P2)
HALT OSD (P5)
CF RES (P8)
OSD FLASH WR (P4)
LCD CONT (P1)
DET-V (P1)
IFB-PROT
IN/OUT-C
CODE2-C
DET-C
BDET2-C
IN/OUT-B
CODE2-B
DET-B
BDET2-B
IFB IN (P1)
RS (P7)
OUT1-0
OUT1-1
OUT1-2
OUT1-3
OUT1-4
OUT1-5
OUT1-6
OUT1-7
OUT1-8
OUT1-9
OUT1-10
OUT1-11
OUT1-12
OUT1-13
OUT1-14
OUT1-15
OUT2-0
OUT2-1
OUT2-2
OUT2-3
OUT2-4
OUT2-5
OUT2-6
OUT2-7
OUT3-0
OUT3-1
OUT3-2
OUT3-3
OUT3-4
OUT3-5
OUT3-6
OUT3-7
CLK IN
CLK OUT
CLK
CE19
CE20
CE21
CE22
CLK CPU
CS3
OE PLL
EXT PLL
DEV PLL
OE FM1
TEST
EXT FMC
DEV FMC
OE FM2
OE OSD
EXT OSD
DEV OSD
OE GEN
EXT GEN
DEV GEN
VDD
VSS
RESET
SCK GEN
SO GEN
SI GEN
MBB
BSY-GEN
BSY-FMC
BSY-PLL
BSY-OSD
HLT-OSD
STP-FMC
STP-PLL
OUT4-0
OUT4-1
OUT4-2
IN1-0
IN1-15
IN2-0
IN2-7
D0
D15
A0
A21
CS0
CS1
CS2
WRH
WRL
XTWE
RD
R ENA
C2301
C2302
C2303
C2304
C2305
C2306
C2307
C2308
C2309
C2310
C2311
C2316
C2317
C2318
C2321
C2322
C2323
C2324
C2325
C2326
R2301
R2302
R2304
R2305
R2306
R2307
R2308
R2309
R2310
R2311
R2312
R2313
R2331
R2332
R2333
R2334
R2335
R2336
R2337
R2338
R2362
R2363
R2364
R2365
R2366
R2367
R2368
R2369
R2390
0.1 25V B:CHIP
10k :CHIP
100 :CHIP
M (3/9)
(I/F)
B-SS1674<08.>-M-P3

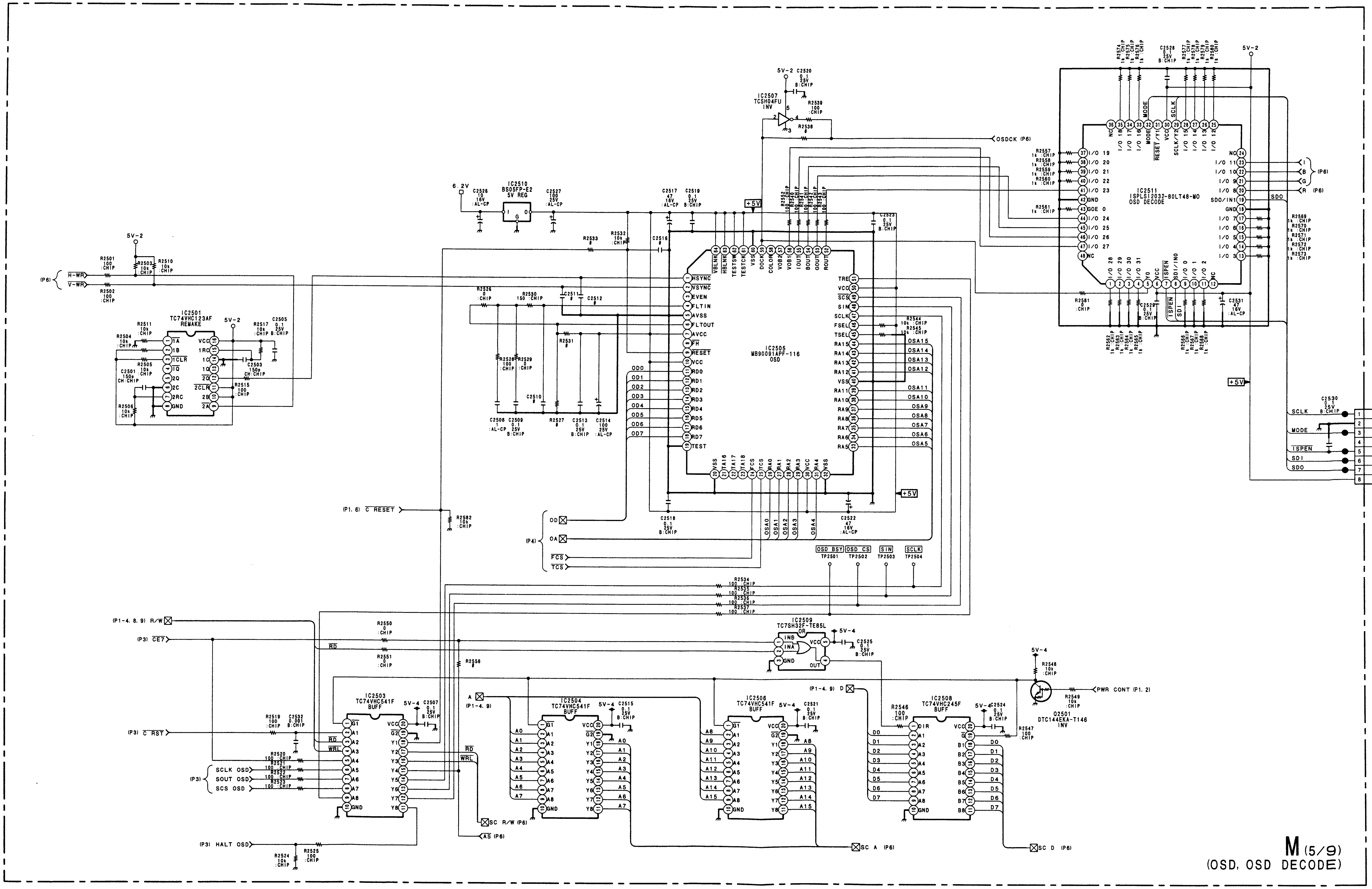
A B C D E F G H

- Refer to page 10-52, 10-53 for Printed Wiring Board
- Refer to page 10-63 for IC Block Diagrams

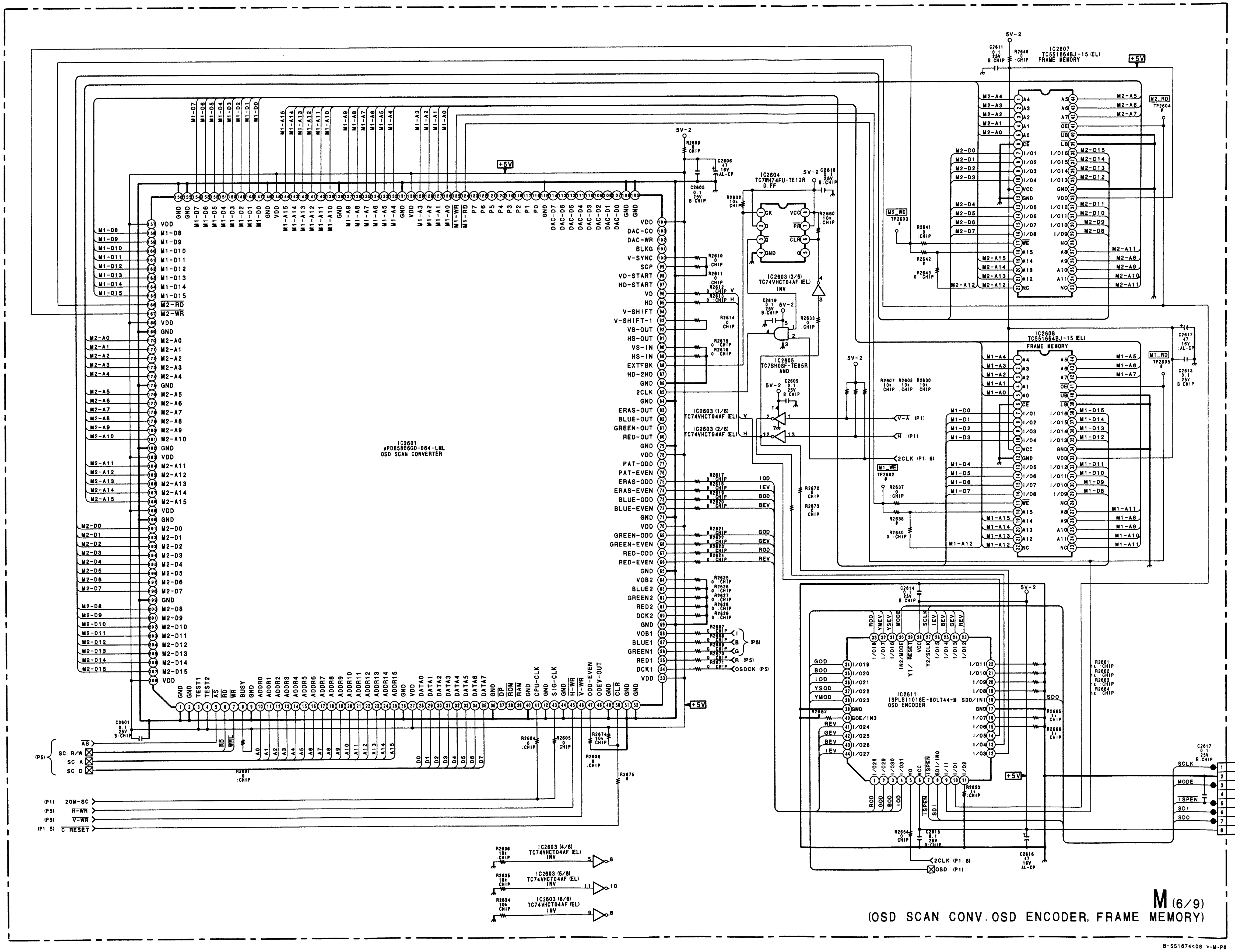

IC2406 TC7SH04FU INV
IC2401 TC74VHC244F BUFF
IC2402 TC74VHC244F BUFF
IC2403 TC74VHC244F BUFF
IC2404 TC74VHC244F BUFF
IC2405 TC74VHC244F BUFF
IC2407 TC7SH04FU INV
IC2408 (1/4) TC74VHC32F OR
IC2408 (2/4) TC74VHC32F OR
IC2408 (3/4) TC74VHC32F OR
IC2408 (4/4) TC74VHC32F OR
IC2409 TC74VHC245F BUFF
IC2410 TC74VHC244F BUFF
IC2411 TC74VHC244F BUFF
IC2412 TC74VHC244F BUFF
IC2413 MBM29F400BC-70PFTN FLASH MEMORY
IC2414 CY7C136-55JC DUAL PORT RAM
(P3) OSD FLASH WR
(P2) SEL OSD
(P1-3, 5, 8, 9) D A
(P1-3, 5, 8, 9) R/W
(P3) CE15
(P5) OA OD
TCS
FCS
RES (P2, 3, 7, 9)
+5V
5V-4
FONT
TABLE
RD
WRL
M (4/9)
(FLASH MEMORY)
B-SS1674<08 >-M-P4

1
2
3
4
5

- Refer to page 10-52, 10-53 for Printed Wiring Board
- Refer to page 10-63 for IC Block Diagrams

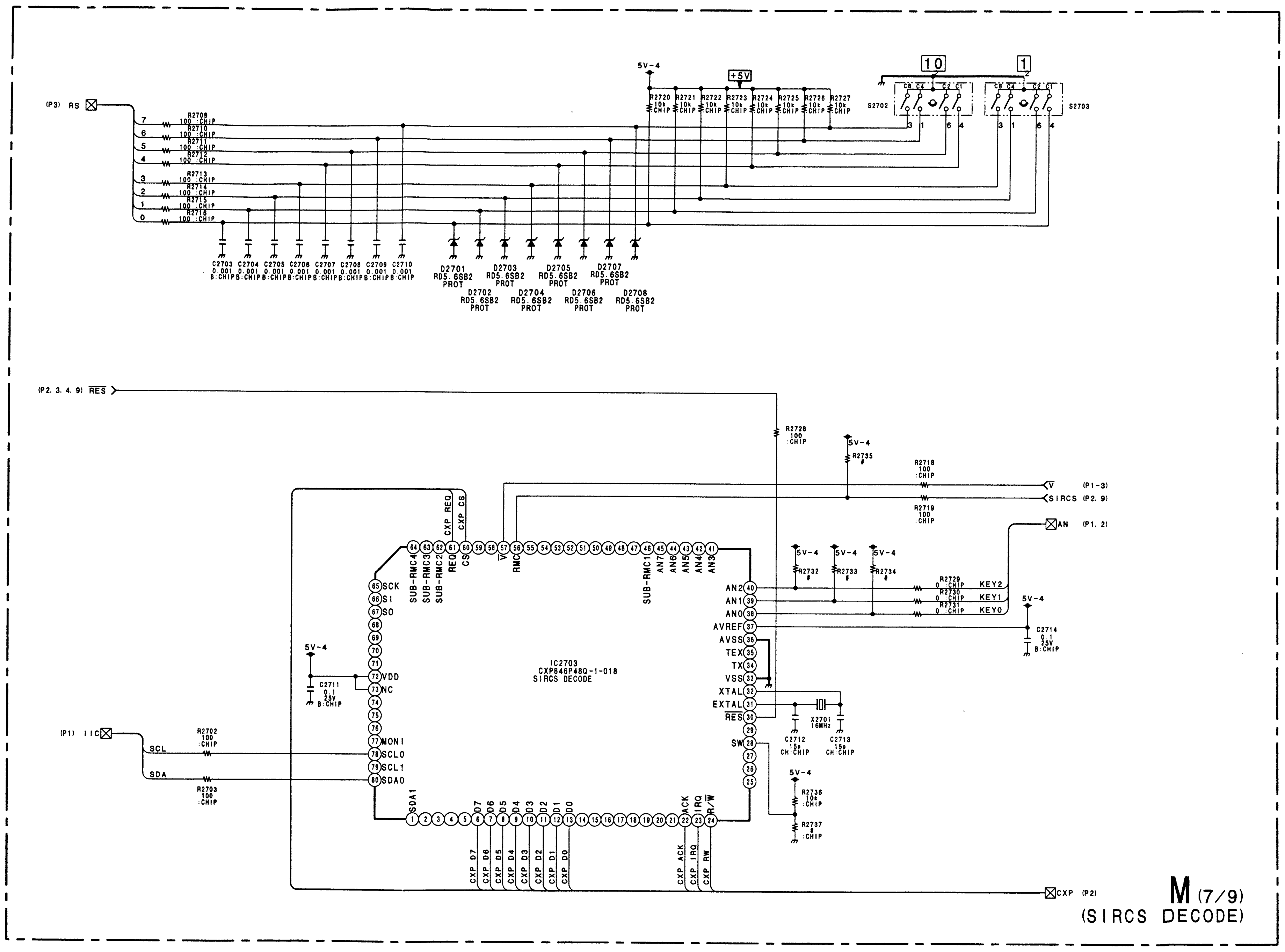

IC2510
BS05FP-E2
5V REG
6.2V
IC2507
TCSH04FU
INV
OSDCK (P6)
IC2505
MB90091APF-116
OSD
IC2511
ISPLSI2032-80LT48-MO
OSD DECODE
IC2501
TC74VHC123AF
REMAKE
H-WR
V-WR
(P6)
OD0
OD1
OD2
OD3
OD4
OD5
OD6
OD7
OSA0
OSA1
OSA2
OSA3
OSA4
OSA5
OSA6
OSA7
OSA8
OSA9
OSA10
OSA11
OSA12
OSA13
OSA14
OSA15
(P1, 6) C RESET
(P4)
OD
OA
FCS
TCS
OSD BSY
TP2501
OSD CS
TP2502
SIN
TP2503
SCLK
TP2504
+5V
CN2501
8P
WHT
:SMD
1 SCLK
2 GND
3 MODE
4 PLUG
5 ISPEN
6 SDI
7 SDO
8 VCC
I
B
G
R (P6)
SDO
IC2509
TC7SH32F-TE85L
OR
5V-4
(P1-4, 8, 9) R/W
(P3) CE7
RD
WRL
IC2503
TC74VHC541F
BUFF
IC2504
TC74VHC541F
BUFF
IC2506
TC74VHC541F
BUFF
IC2508
TC74VHC245F
BUFF
(P3) C RST
(P3) SCLK OSD
SOUT OSD
SCS OSD
(P3) HALT OSD
A
(P1-4, 9)
(P1-4, 9) D
A0
A1
A2
A3
A4
A5
A6
A7
A8
A9
A10
A11
A12
A13
A14
A15
D0
D1
D2
D3
D4
D5
D6
D7
SC R/W (P6)
AS (P6)
SC A (P6)
SC D (P6)
Q2501
DTC144EKA-T146
INV
PWR CONT (P1, 2)
5V-2
M (5/9)
(OSD, OSD DECODE)
8-SS1674< 08 >-M-P5

- Refer to page 10-48, 10-49 for Printed Wiring Board
- Refer to page 10-59 for IC Block Diagrams


IC2601
μPD65808GD-064-LML
OSD SCAN CONVERTER
IC2607
TC5516648J-15 (EL)
FRAME MEMORY
IC2608
TC5516648J-15 (EL)
FRAME MEMORY
IC2604
TC7WH74FU-TE12R
D.FF
IC2605
TC7SH08F-TE85R
AND
IC2603 (1/6)
TC74VHCT04AF (EL)
IC2603 (2/6)
TC74VHCT04AF (EL)
IC2603 (3/6)
TC74VHCT04AF (EL)
INV
IC2603 (4/6)
TC74VHCT04AF (EL)
INV
IC2603 (5/6)
TC74VHCT04AF (EL)
INV
IC2603 (6/6)
TC74VHCT04AF (EL)
INV
IC2611
ISPLSI1016E-80LT44-M
OSD ENCODER
CN2601
8P
WHT
SMD
SCLK
GND
MODE
PLUG
ISPEN
SDI
SDO
VCC
5V-2
+5V
M2_WE
M2_RD
M1_RD
M1_WE
V-A (P1)
H (P1)
2CLK (P1, 6)
OSDCK (P5)
OSD (P1)
(P5) AS
SC R/W
SC A
SC D
(P1) 20M-SC
(P5) H-WR
(P5) V-WR
(P1, 5) C RESET
M (6/9)
(OSD SCAN CONV. OSD ENCODER, FRAME MEMORY)
B-SS1674<08>-M-P6

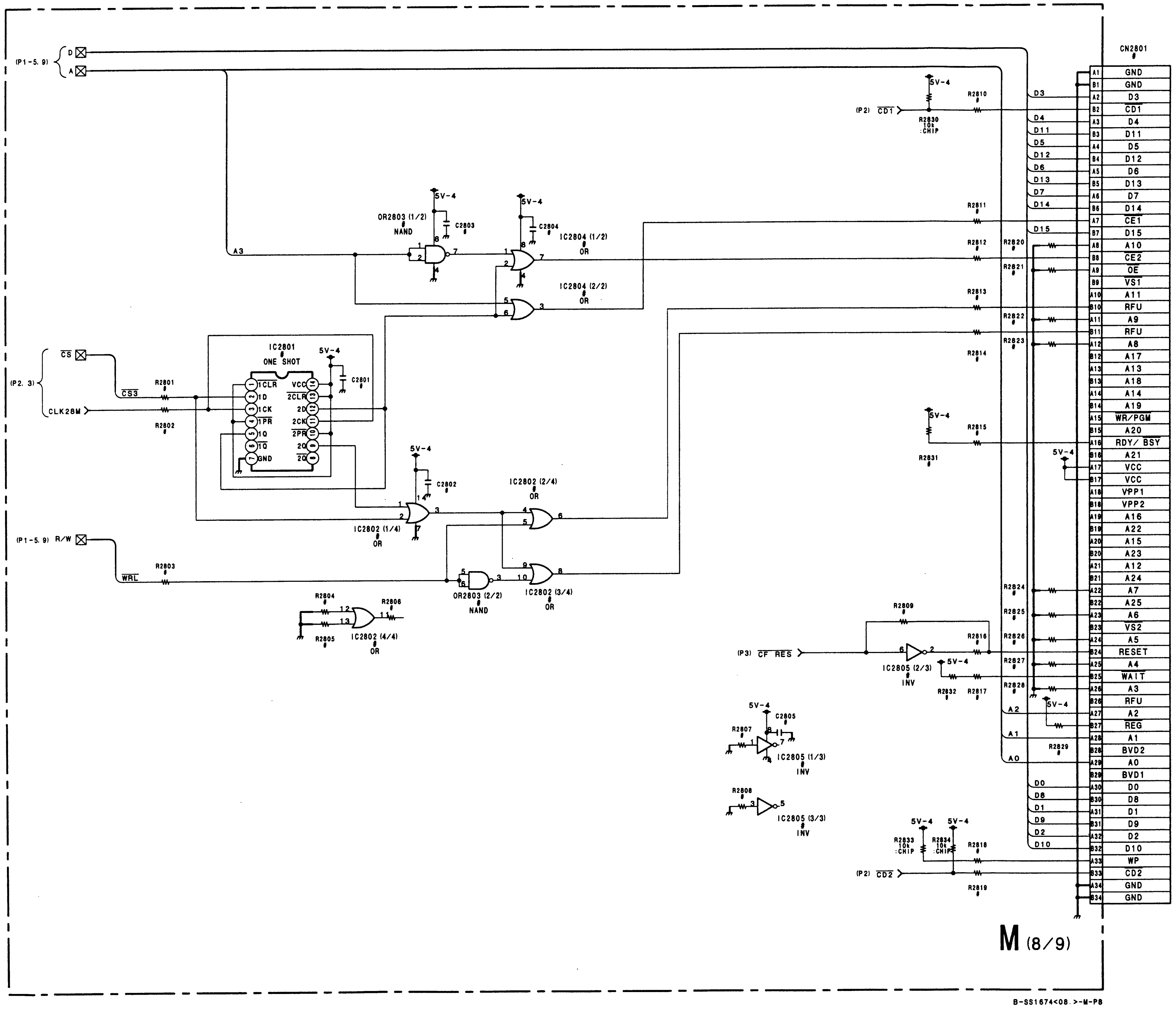
M (7/9)

- Refer to page 10-52, 10-53 for Printed Wiring Board
- Refer to page 10-63 for IC Block Diagrams


(P3) RS
7
6
5
4
3
2
1
0
R2709 100 :CHIP
R2710 100 :CHIP
R2711 100 :CHIP
R2712 100 :CHIP
R2713 100 :CHIP
R2714 100 :CHIP
R2715 100 :CHIP
R2716 100 :CHIP
C2703 0.001 B:CHIP
C2704 0.001 B:CHIP
C2705 0.001 B:CHIP
C2706 0.001 B:CHIP
C2707 0.001 B:CHIP
C2708 0.001 B:CHIP
C2709 0.001 B:CHIP
C2710 0.001 B:CHIP
D2701 RD5.6SB2 PROT
D2702 RD5.6SB2 PROT
D2703 RD5.6SB2 PROT
D2704 RD5.6SB2 PROT
D2705 RD5.6SB2 PROT
D2706 RD5.6SB2 PROT
D2707 RD5.6SB2 PROT
D2708 RD5.6SB2 PROT
5V-4
+5V
R2720 10k :CHIP
R2721 10k :CHIP
R2722 10k :CHIP
R2723 10k :CHIP
R2724 10k :CHIP
R2725 10k :CHIP
R2726 10k :CHIP
R2727 10k :CHIP
10
1
S2702
S2703
C8 C4 C2 C1
3 1 6 4
2
(P2. 3. 4. 9) RES
R2728 100 :CHIP
5V-4
R2735 #
R2718 100 :CHIP
R2719 100 :CHIP
V (P1-3)
SIRCS (P2. 9)
AN (P1. 2)
CXP REQ
CXP CS
SUB-RMC4
SUB-RMC3
SUB-RMC2
REQ
CS
V
RMC
SUB-RMC1
AN7
AN6
AN5
AN4
AN3
SCK
SI
SO
VDD
NC
MONI
SCL0
SCL1
SDA0
SDA1
D7 D6 D5 D4 D3 D2 D1 D0
ACK
IRQ
R/W
AN2
AN1
AN0
AVREF
AVSS
TEX
TX
VSS
XTAL
EXTAL
RES
SW
IC2703
CXP846P48Q-1-018
SIRCS DECODE
C2711 0.1 25V B:CHIP
(P1) IIC
SCL
SDA
R2702 100 :CHIP
R2703 100 :CHIP
R2732 #
R2733 #
R2734 #
R2729 0 :CHIP
R2730 0 :CHIP
R2731 0 :CHIP
KEY2
KEY1
KEY0
C2714 0.1 25V B:CHIP
X2701 16MHz
C2712 15p CH:CHIP
C2713 15p CH:CHIP
R2736 10k :CHIP
R2737 # :CHIP
CXP D7
CXP D6
CXP D5
CXP D4
CXP D3
CXP D2
CXP D1
CXP D0
CXP ACK
CXP IRQ
CXP RW
CXP (P2)
M (7/9)
(SIRCS DECODE)

B-SS1674<08.>-M-P7

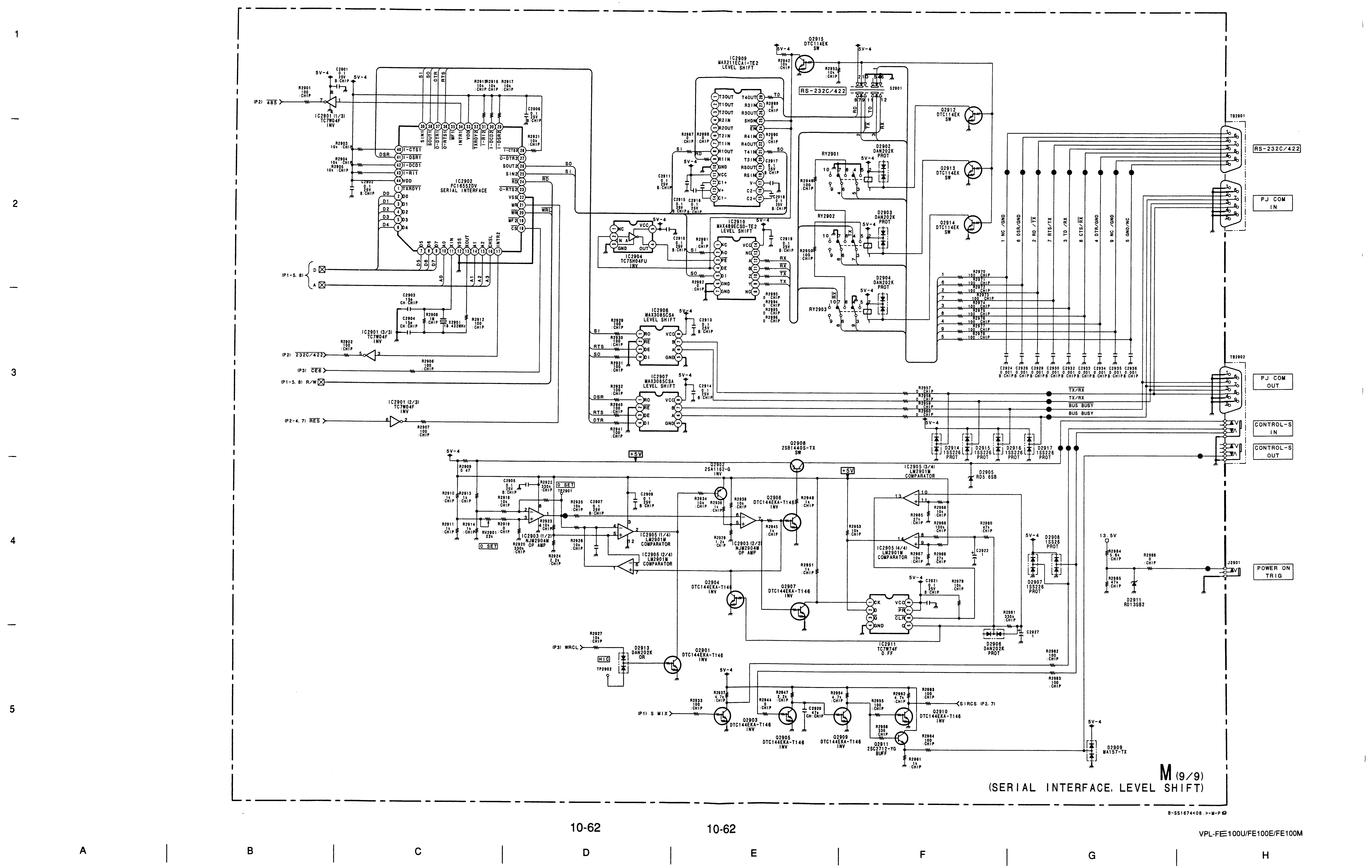
- Refer to page 10-52, 10-53 for Printed Wiring Board
- Refer to page 10-63 for IC Block Diagrams


(P1-5, 9) D
A
A3
OR2803 (1/2) NAND
C2803
5V-4
C2804
IC2804 (1/2) OR
IC2804 (2/2) OR
(P2, 3) CS
CS3
CLK28M
R2801
R2802
IC2801 ONE SHOT
1CLR
1D
1CK
1PR
1Q
1Q
GND
VCC
2CLR
2D
2CK
2PR
2Q
2Q
C2801
5V-4
C2802
IC2802 (1/4) OR
IC2802 (2/4) OR
IC2802 (3/4) OR
IC2802 (4/4) OR
OR2803 (2/2) NAND
(P1-5, 9) R/W
WRL
R2803
R2804
R2805
R2806
(P2) CD1
R2810
R2830 10k :CHIP
R2811
R2812
R2813
R2814
R2815
R2831
R2820
R2821
R2822
R2823
R2824
R2825
R2826
R2827
R2828
R2829
R2809
R2816
R2817
R2832
(P3) CF RES
IC2805 (2/3) INV
IC2805 (1/3) INV
IC2805 (3/3) INV
C2805
R2807
R2808
R2833 10k :CHIP
R2834 10k :CHIP
R2818
R2819
(P2) CD2
D3
D4
D11
D5
D12
D6
D13
D7
D14
D15
A2
A1
A0
D0
D8
D1
D9
D2
D10
CN2801
A1 GND
B1 GND
A2 D3
B2 CD1
A3 D4
B3 D11
A4 D5
B4 D12
A5 D6
B5 D13
A6 D7
B6 D14
A7 CE1
B7 D15
A8 A10
B8 CE2
A9 OE
B9 VS1
A10 A11
B10 RFU
A11 A9
B11 RFU
A12 A8
B12 A17
A13 A13
B13 A18
A14 A14
B14 A19
A15 WR/PGM
B15 A20
A16 RDY/ BSY
B16 A21
A17 VCC
B17 VCC
A18 VPP1
B18 VPP2
A19 A16
B19 A22
A20 A15
B20 A23
A21 A12
B21 A24
A22 A7
B22 A25
A23 A6
B23 VS2
A24 A5
B24 RESET
A25 A4
B25 WAIT
A26 A3
B26 RFU
A27 A2
B27 REG
A28 A1
B28 BVD2
A29 A0
B29 BVD1
A30 D0
B30 D8
A31 D1
B31 D9
A32 D2
B32 D10
A33 WP
B33 CD2
A34 GND
B34 GND
M (8/9)
B-SS1674<08.>-M-P8

1
2
3
4
5

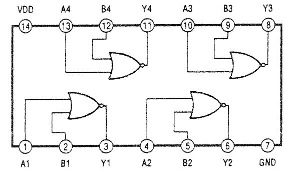
A | B | C | D | E | F | G | H

- Refer to page 10-52, 10-53 for Printed Wiring Board
- Refer to page 10-63 for IC Block Diagrams

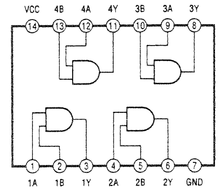

1
2
3
4
5
A
B
C
D
E
F
G
H
IC2901 (1/3) TC7W04F INV
IC2901 (2/3) TC7W04F INV
IC2901 (3/3) TC7W04F INV
IC2902 PC16552DV SERIAL INTERFACE
IC2904 TC7SH04FU INV
IC2909 MAX211ECAI-TE2 LEVEL SHIFT
IC2910 MAX489ECSD-TE2 LEVEL SHIFT
IC2906 MAX3085CSA LEVEL SHIFT
IC2907 MAX3085CSA LEVEL SHIFT
IC2903 (1/2) NJM2904M OP AMP
IC2903 (2/2) NJM2904M OP AMP
IC2905 (1/4) LM2901M COMPARATOR
IC2905 (2/4) LM2901M COMPARATOR
IC2905 (3/4) LM2901M COMPARATOR
IC2905 (4/4) LM2901M COMPARATOR
IC2911 TC7W74F D.FF
Q2915 DTC114EK SW
Q2912 DTC114EK SW
Q2913 DTC114EK SW
Q2914 DTC114EK SW
Q2908 2SB1440S-TX SW
Q2902 2SA1162-G INV
Q2906 DTC144EKA-T146 INV
Q2904 DTC144EKA-T146 INV
Q2907 DTC144EKA-T146 INV
Q2901 DTC144EKA-T146 INV
Q2903 DTC144EKA-T146 INV
Q2905 DTC144EKA-T146 INV
Q2909 DTC144EKA-T146 INV
Q2910 DTC144EKA-T146 INV
Q2911 2SC2712-YG BUFF
D2902 DAN202K PROT
D2903 DAN202K PROT
D2904 DAN202K PROT
D2905 RD5.6SB
D2906 DAN202K PROT
D2907 1SS226 PROT
D2908 1SS226 PROT
D2909 MA157-TX
D2911 RD13SB2
D2913 DAN202K OR
D2914 1SS226 PROT
D2915 1SS226 PROT
D2916 1SS226 PROT
D2917 1SS226 PROT
RY2901
RY2902
RY2903
S2901
X2901 18.432MHz
RV2901 22k
TB2901
TB2902
J2901
RS-232C/422
PJ COM IN
PJ COM OUT
CONTROL-S IN
CONTROL-S OUT
POWER ON TRIG
1 NC /GND
6 DSR/GND
2 RD /TX
7 RTS/TX
3 TD /RX
8 CTS/RX
4 DTR/GND
9 NC /GND
5 GND/NC
TX/RX
TX/RX
BUS BUSY
BUS BUSY
(P2) 485
(P1-5, 8) D
A
(P2) 232C/422
(P3) CE6
(P1-5, 8) R/W
(P2-4, 7) RES
(P3) WRCL
(P1) S MIX
SIRCS (P2, 7)
5V-4
+5V
13.5V
0 SET
TP2901
TP2902
HIC
M (9/9)
(SERIAL INTERFACE, LEVEL SHIFT)
B-SS1674<08>-M-P

M Board IC Block Diagrams

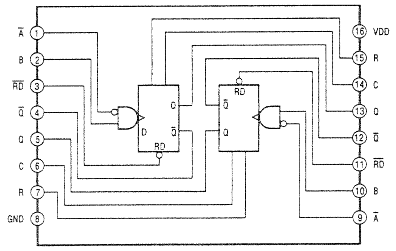
TC74VHC02F (IC2006)


VDD
A4
B4
Y4
A3
B3
Y3
14
13
12
11
10
9
8
1
2
3
4
5
6
7
A1
B1
Y1
A2
B2
Y2
GND

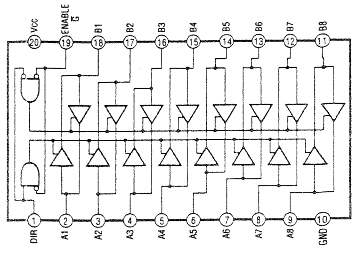
TC74VHC08F (IC2211)


VCC
4B
4A
4Y
3B
3A
3Y
14
13
12
11
10
9
8
1
2
3
4
5
6
7
1A
1B
1Y
2A
2B
2Y
GND

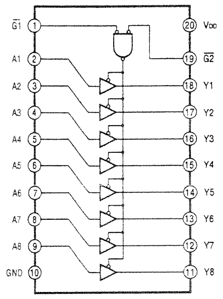
TC74VHC123AF (IC2012, 2501)


$\overline{A}$ 1
B 2
$\overline{RD}$ 3
$\overline{Q}$ 4
Q 5
C 6
R 7
GND 8
16 VDD
15 R
14 C
13 Q
12 $\overline{Q}$
11 $\overline{RD}$
10 B
9 $\overline{A}$
D
Q
$\overline{Q}$
RD
RD
$\overline{Q}$
Q

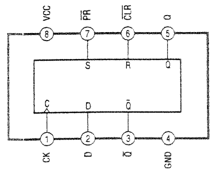
TV74VHC245F (IC2008)


VCC
ENABLE $\overline{G}$
B1
B2
B3
B4
B5
B6
B7
B8
20
19
18
17
16
15
14
13
12
11
1
2
3
4
5
6
7
8
9
10
DIR
A1
A2
A3
A4
A5
A6
A7
A8
GND

TC74VHC541F
(IC2001 – 2004, 2007, 2503, 2504, 2506, 2508)

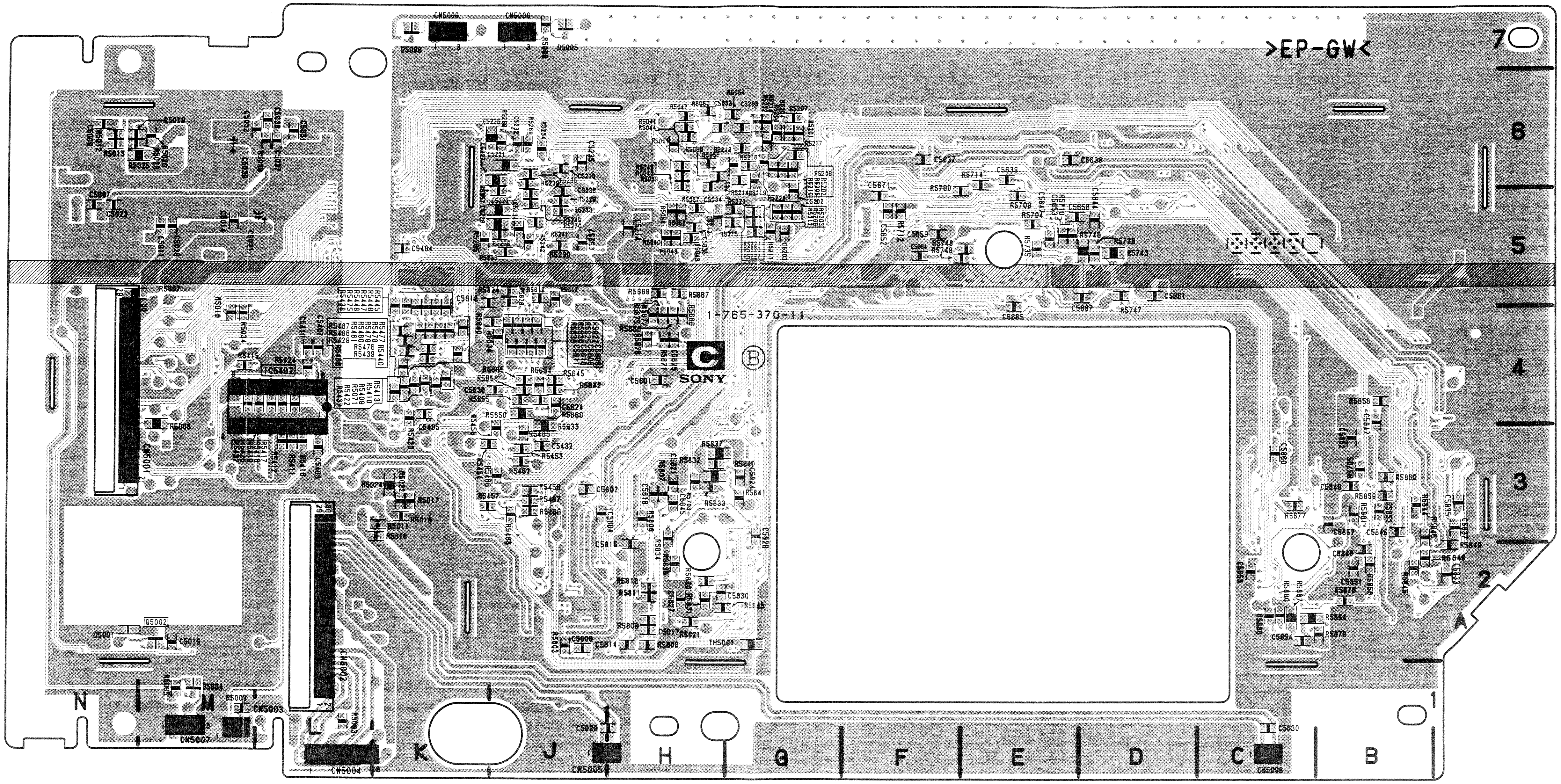

$\overline{G1}$ 1
A1 2
A2 3
A3 4
A4 5
A5 6
A6 7
A7 8
A8 9
GND 10
20 VDD
19 $\overline{G2}$
18 Y1
17 Y2
16 Y3
15 Y4
14 Y5
13 Y6
12 Y7
11 Y8

TC7W74F (IC2604)


VCC
$\overline{PR}$
$\overline{CLR}$
Q
8
7
6
5
S
R
Q
C
D
$\overline{Q}$
1
2
3
4
CK
D
$\overline{Q}$
GND

C, UC

C, UC

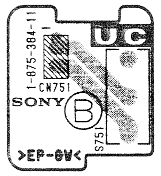

>EP-GW<
1-765-370-11
C
SONY
Ⓑ
CN5001
CN5002
CN5003
CN5004
CN5005
CN5006
CN5007
CN5008
CN5009
IC5402
TH5001
A
B
C
D
E
F
G
H
J
K
L
M
N
1
2
3
4
5
6
7

C

1-670-903-11

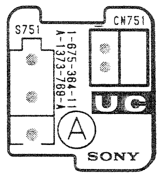
IC5001	N-5	IC5209	J-5	IC5805	B-4	TP5000	L-5	TP5401	L-5	TP5803	H-1
IC5002	L-3	IC5210	J-5	IC5806	A-2	TP5001	M-4	TP5402	L-4	TP5810	B-1
IC5003	M-6	IC5211	K-5	IC5807	A-3	TP5002	M-4	TP5404	L-4	TP5813	G-3
IC5004	M-5	IC5402	L-4	IC5808	A-5	TP5003	M-4	TP5405	K-6	TP5814	H-1
IC5005	N-2	IC5403	L-4			TP5004	J-1	TP5406	G-4	TP5815	H-2
IC5007	L-6	IC5405	J-3	Q5001	N-2	TP5005	N-2	TP5407	J-2	TP5817	A-3
IC5008	H-6	IC5406	J-3	Q5002	* M-2	TP5007	L-3	TP5408	K-3	TP5818	A-4
IC5009	H-5	IC5601	G-4	Q5601	J-4	TP5008	N-1	TP5409	J-3	TP5819	C-2
IC5010	H-5	IC5602	K-4	Q5602	J-4	TP5009	K-3	TP5410	K-4	TP5820	B-1
IC5011	M-1	IC5603	D-6	Q5603	E-5	TP5010	M-6	TP5411	J-2	TP5823	B-1
IC5012	K-1	IC5604	D-6	Q5604	D-4	TP5012	H-7	TP5412	K-2	TP5824	B-1
IC5013	M-5	IC5605	J-4	Q5605	E-5	TP5013	H-7	TP5413	H-4	TP5827	B-1
IC5201	G-6	IC5606	F-6	Q5801	H-3	TP5014	H-7	TP5414	K-3	TP5828	B-1
IC5202	G-5	IC5607	D-6	Q5802	H-3	TP5015	H-7	TP5602	D-5	TP5830	C-3
IC5203	G-5	IC5608	J-4	Q5803	H-3	TP5016	H-7	TP5603	F-6	TP5831	C-4
IC5204	J-5	IC5609	C-5	Q5804	C-2	TP5017	H-6	TP5605	E-5	TP5832	C-2
IC5205	J-5	IC5801	H-4	Q5805	B-2	TP5018	L-4	TP5617	F-5		
IC5206	J-5	IC5802	H-3	Q5806	C-2	TP5019	L-5	TP5618	F-5	RV5001	H-6
IC5207	J-5	IC5803	H-1			TP5020	M-6	TP5801	J-2	RV5002	H-6
IC5208	H-5	IC5804	H-4			TP5021	L-5	TP5802	J-2	RV5003	H-5

*:B Side mount


UC
1-675-384-11
CN751
SONY
Ⓑ
S751
>EP-GW<

UC – B SIDE –

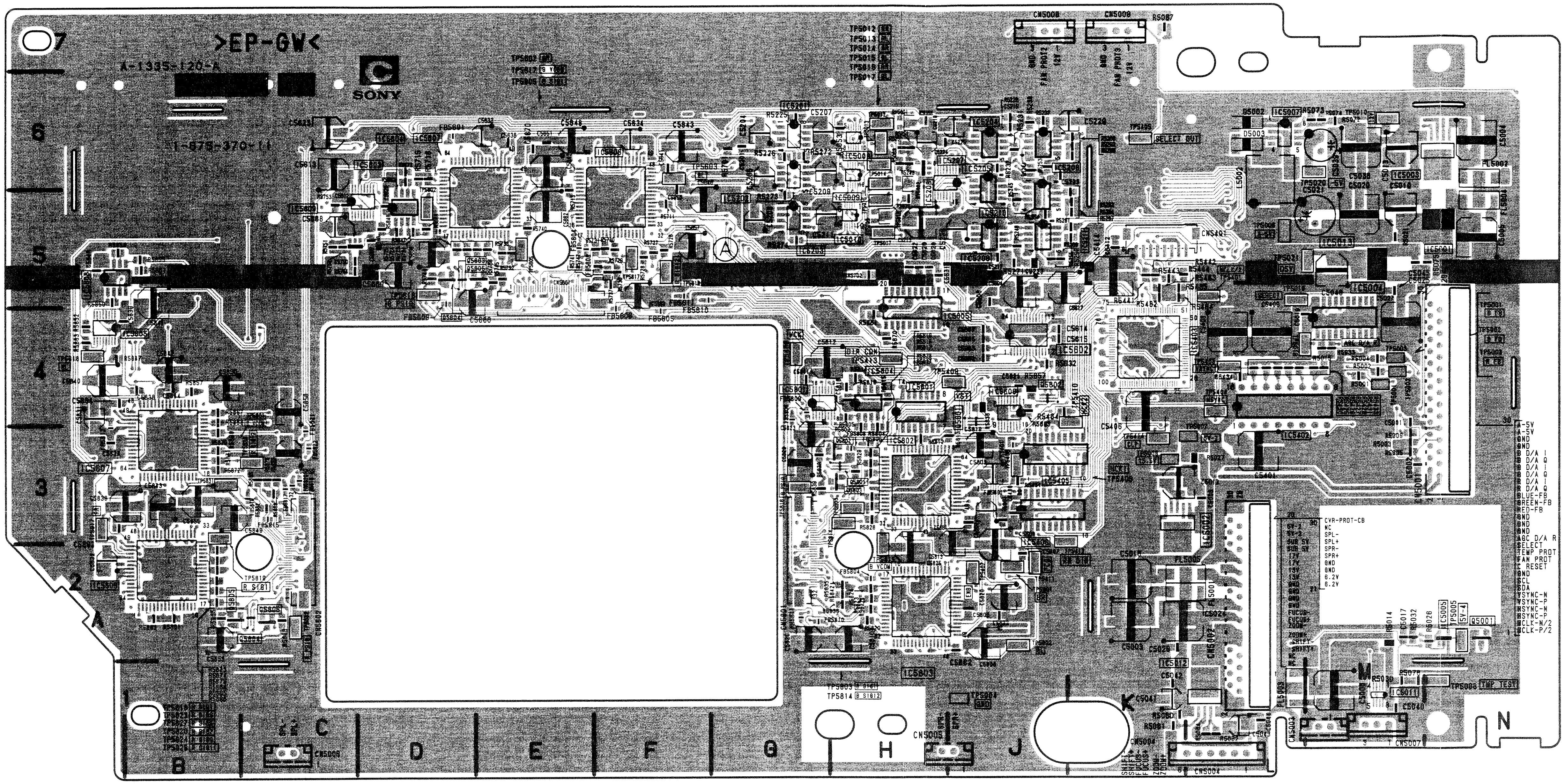
SUFFIX ; -11


S751
CN751
1-675-384-11
UC
Ⓐ
SONY

UC – A SIDE –

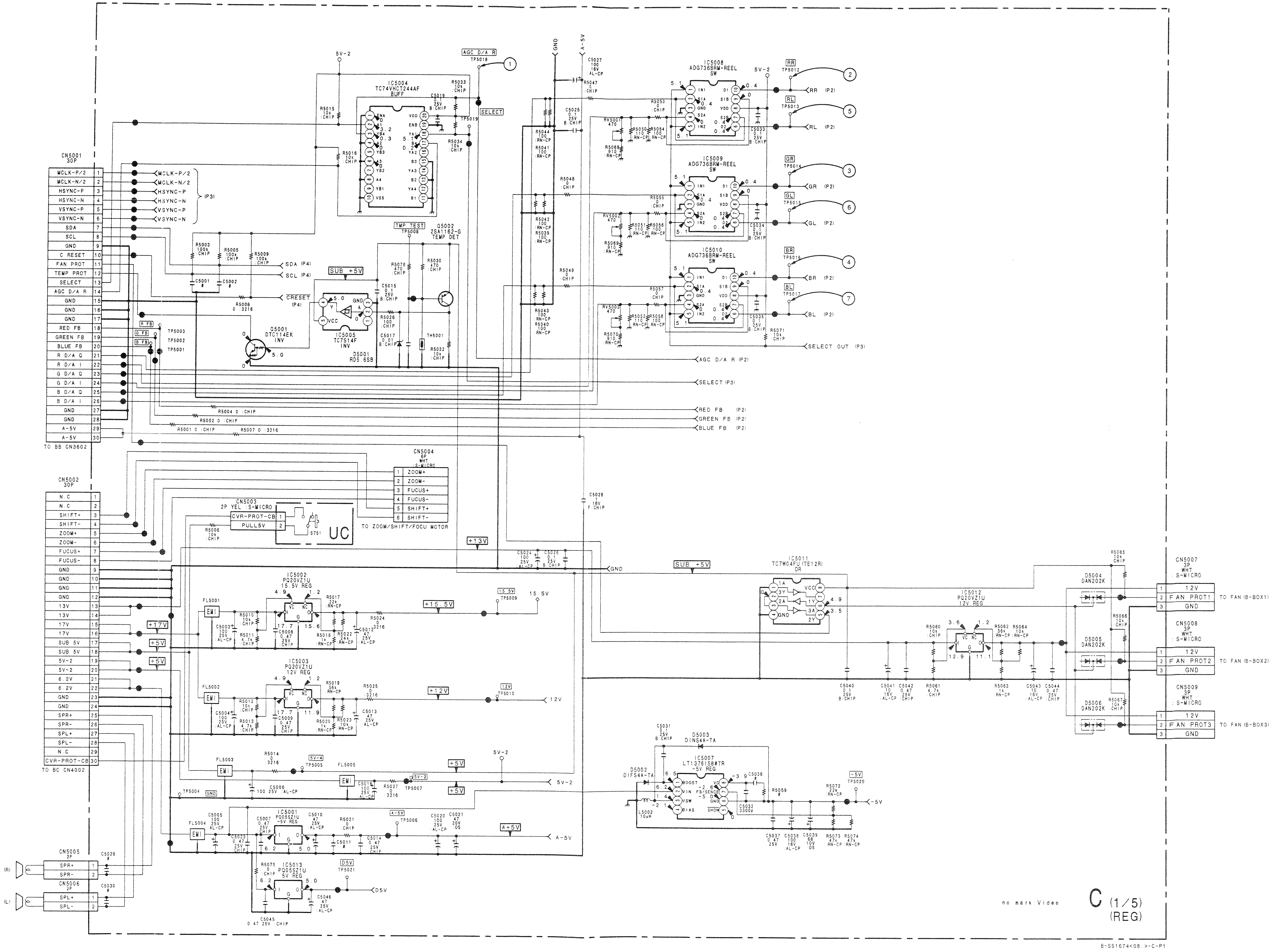
SUFFIX ; -11

C C


>EP-GW<
A-1335-120-A
SONY
1-675-370-11
A
B
C
D
E
F
G
H
J
K
L
M
N
1
2
3
4
5
6
7
SELECT OUT
TMP TEST
CNS008
CNS009
CNS401
CNS004
CNS005
CNS006
CNS007
CVR-PROT-CB
A-5V
GND
BLUE-FB
GREEN-FB
RED-FB
SELECT
TEMP PROT
FAN PROT
SCL
SDA
VSYNC-N
VSYNC-P
HSYNC-N
HSYNC-P
CLK-N/2
CLK-P/2

C (1/5), UC

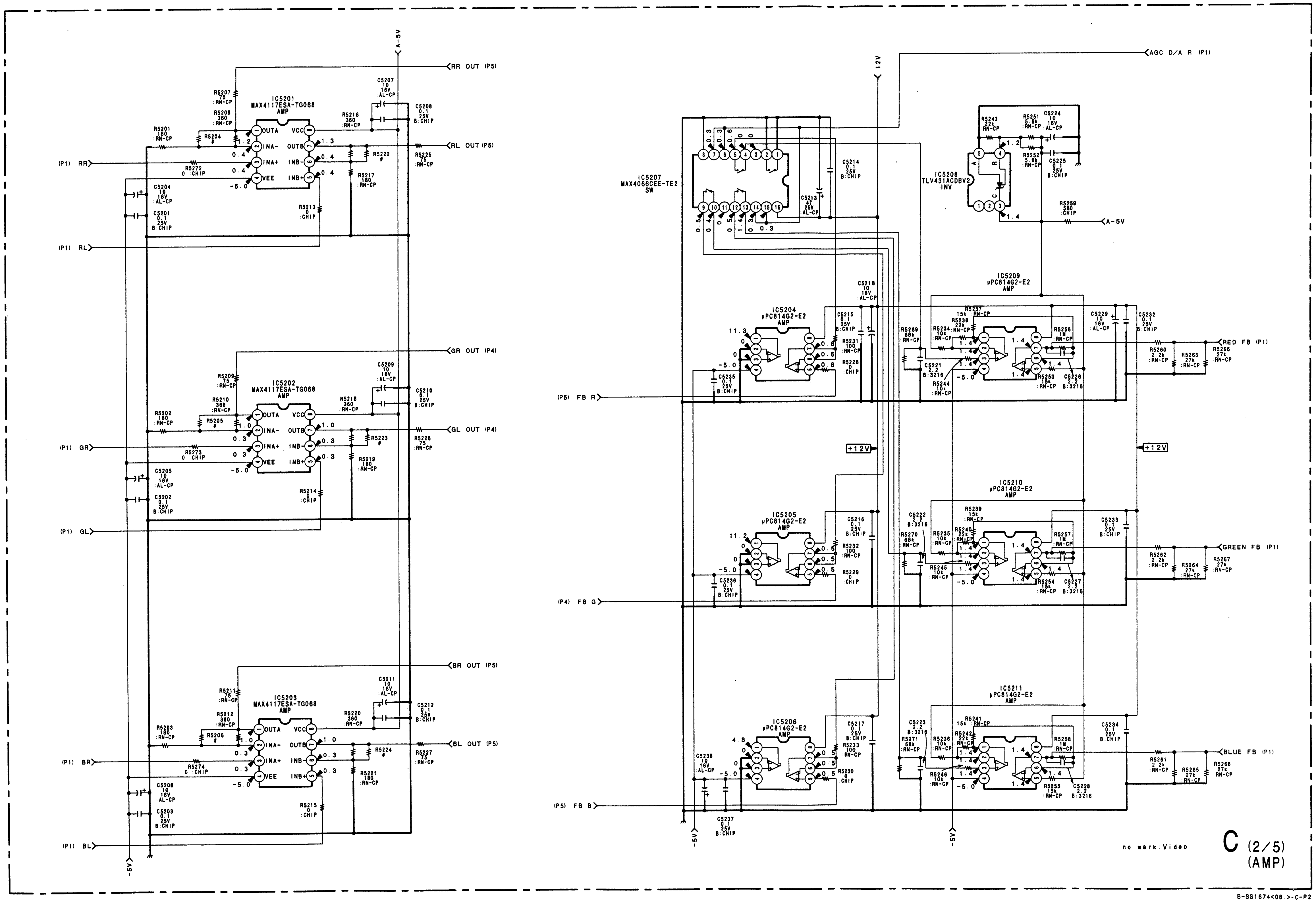
- Refer to page 10-64, 10-65 for Printed Wiring Board
- Refer to page 10-71 for Waveforms
- Refer to page 10-71 for IC Block Diagrams


CN5001 30P
MCLK-P/2
MCLK-N/2
HSYNC-P
HSYNC-N
VSYNC-P
VSYNC-N
SDA
SCL
GND
C RESET
FAN PROT
TEMP PROT
SELECT
AGC D/A R
RED FB
GREEN FB
BLUE FB
R D/A Q
R D/A I
G D/A Q
G D/A I
B D/A Q
B D/A I
A-5V
TO BB CN3602
IC5004 TC74VHCT244AF BUFF
Q5002 2SA1162-G TEMP DET
IC5005 TC7S14F INV
Q5001 DTC114EK INV
D5001 RD5.6SB
TH5001
IC5008 ADG736BRM-REEL SW
IC5009 ADG736BRM-REEL SW
IC5010 ADG736BRM-REEL SW
RR (P2)
RL (P2)
GR (P2)
GL (P2)
BR (P2)
BL (P2)
SELECT OUT (P3)
AGC D/A R (P2)
SELECT (P3)
RED FB (P2)
GREEN FB (P2)
BLUE FB (P2)
SDA (P4)
SCL (P4)
CRESET (P4)
CN5004 6P WHT S-MICRO
ZOOM+
ZOOM-
FUCUS+
FUCUS-
SHIFT+
SHIFT-
TO ZOOM/SHIFT/FOCU MOTOR
CN5003 2P YEL S-MICRO
CVR-PROT-CB
PULL5V
S751
UC
CN5002 30P
N.C
SHIFT+
SHIFT-
ZOOM+
ZOOM-
FUCUS+
FUCUS-
GND
13V
17V
SUB 5V
5V-2
6.2V
SPR+
SPR-
SPL+
SPL-
CVR-PROT-CB
TO BC CN4002
IC5002 PQ20VZ1U 15.5V REG
IC5003 PQ20VZ1U 12V REG
IC5001 PQ05SZ1U -5V REG
IC5013 PQ05SZ1U 5V REG
FL5001
FL5002
FL5003
FL5004
FL5005
+15.5V
+12V
+17V
+5V
+13V
A+5V
A-5V
5V-2
D5V
SUB +5V
IC5011 TC7W04FU(TE12R) OR
IC5012 PQ20VZ1U 12V REG
IC5007 LT1376IS8#TR -5V REG
D5002 D1FS4A-TA
D5003 D1NS4A-TA
D5004 DAN202K
D5005 DAN202K
D5006 DAN202K
CN5007 3P WHT S-MICRO
CN5008 3P WHT S-MICRO
CN5009 3P WHT S-MICRO
12V
FAN PROT1
FAN PROT2
FAN PROT3
TO FAN (B-BOX1)
TO FAN (B-BOX2)
TO FAN (B-BOX3)
CN5005 2P
CN5006 2P
(R)
(L)
no mark:Video
C (1/5) (REG)
B-SS1674<08>-C-P1

10-66

C (2/5) C (2/5)

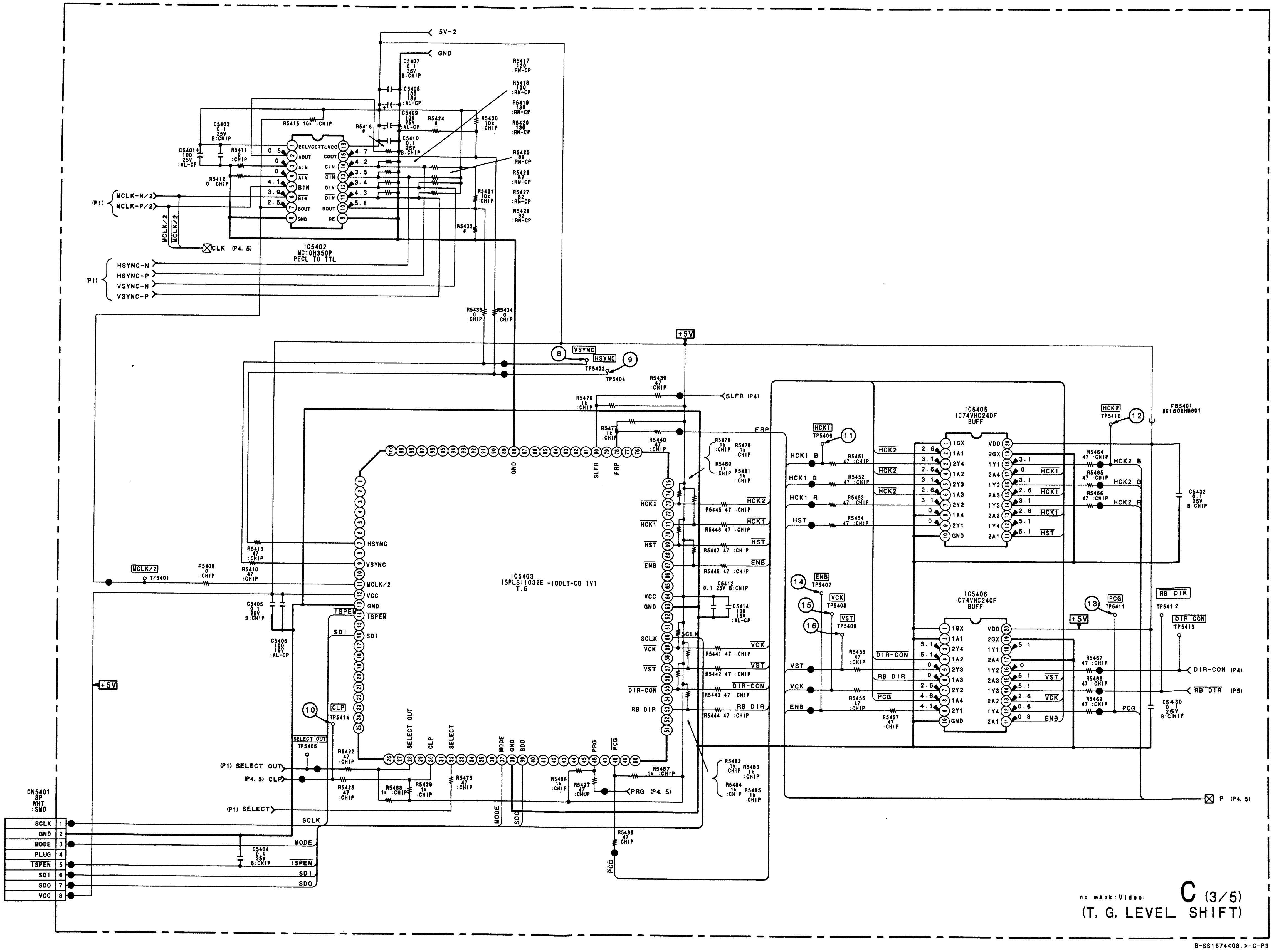
- Refer to page 10-64, 10-65 for Printed Wiring Board
- Refer to page 10-71 for Waveforms
- Refer to page 10-71 for IC Block Diagrams


IC5201 MAX4117ESA-TG068 AMP
IC5202 MAX4117ESA-TG068 AMP
IC5203 MAX4117ESA-TG068 AMP
IC5204 μPC814G2-E2 AMP
IC5205 μPC814G2-E2 AMP
IC5206 μPC814G2-E2 AMP
IC5207 MAX4066CEE-TE2 SW
IC5208 TLV431ACDBV2 INV
IC5209 μPC814G2-E2 AMP
IC5210 μPC814G2-E2 AMP
IC5211 μPC814G2-E2 AMP
(P1) RR
(P1) RL
(P1) GR
(P1) GL
(P1) BR
(P1) BL
RR OUT (P5)
RL OUT (P5)
GR OUT (P4)
GL OUT (P4)
BR OUT (P5)
BL OUT (P5)
(P5) FB R
(P4) FB G
(P5) FB B
AGC D/A R (P1)
RED FB (P1)
GREEN FB (P1)
BLUE FB (P1)
A-5V
-5V
12V
+12V
OUTA
VCC
INA-
OUTB
INA+
INB-
VEE
INB+
no mark:Video
C (2/5) (AMP)
B-SS1674<08 >-C-P2

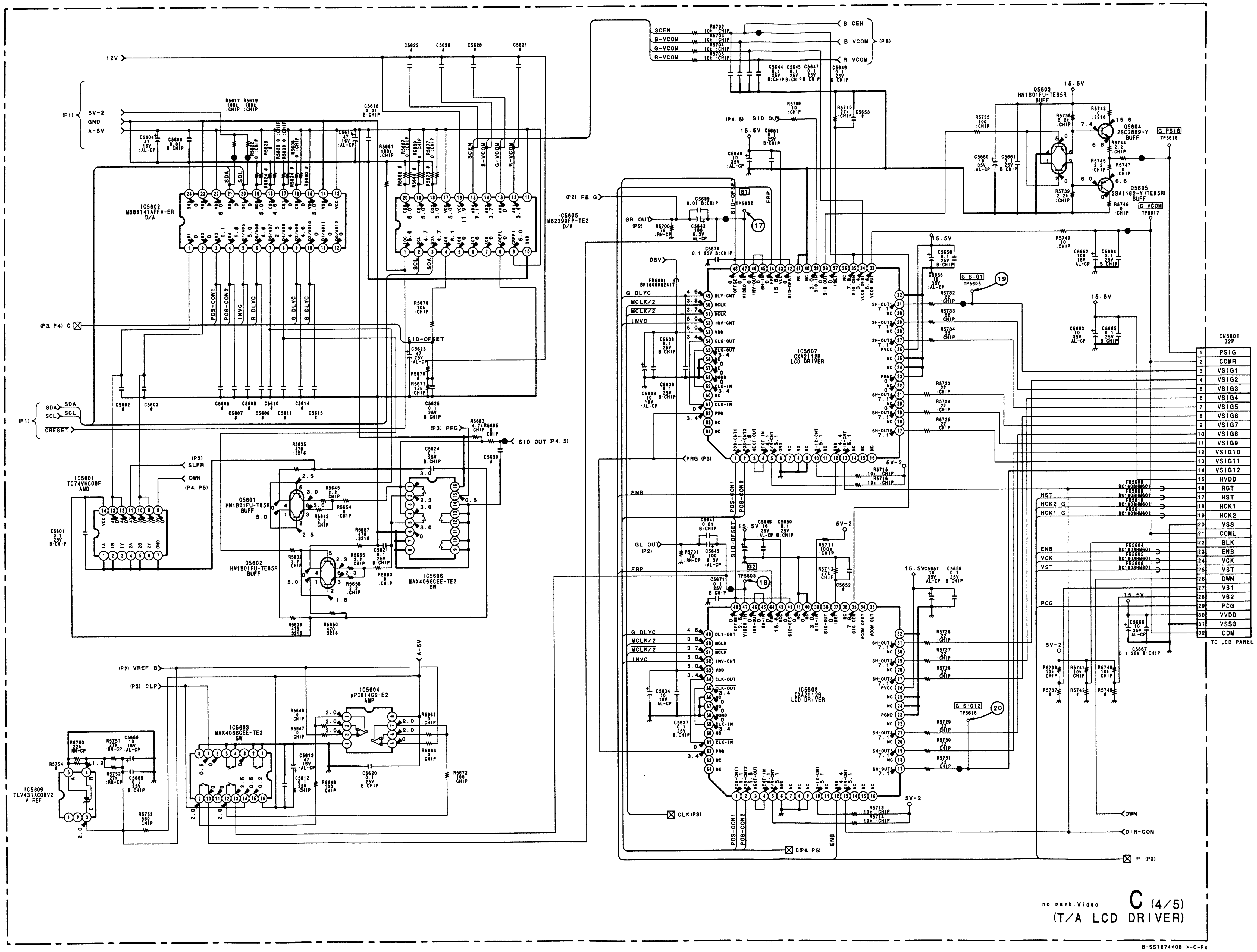
1
2
3
4
5

A B C D E F G H

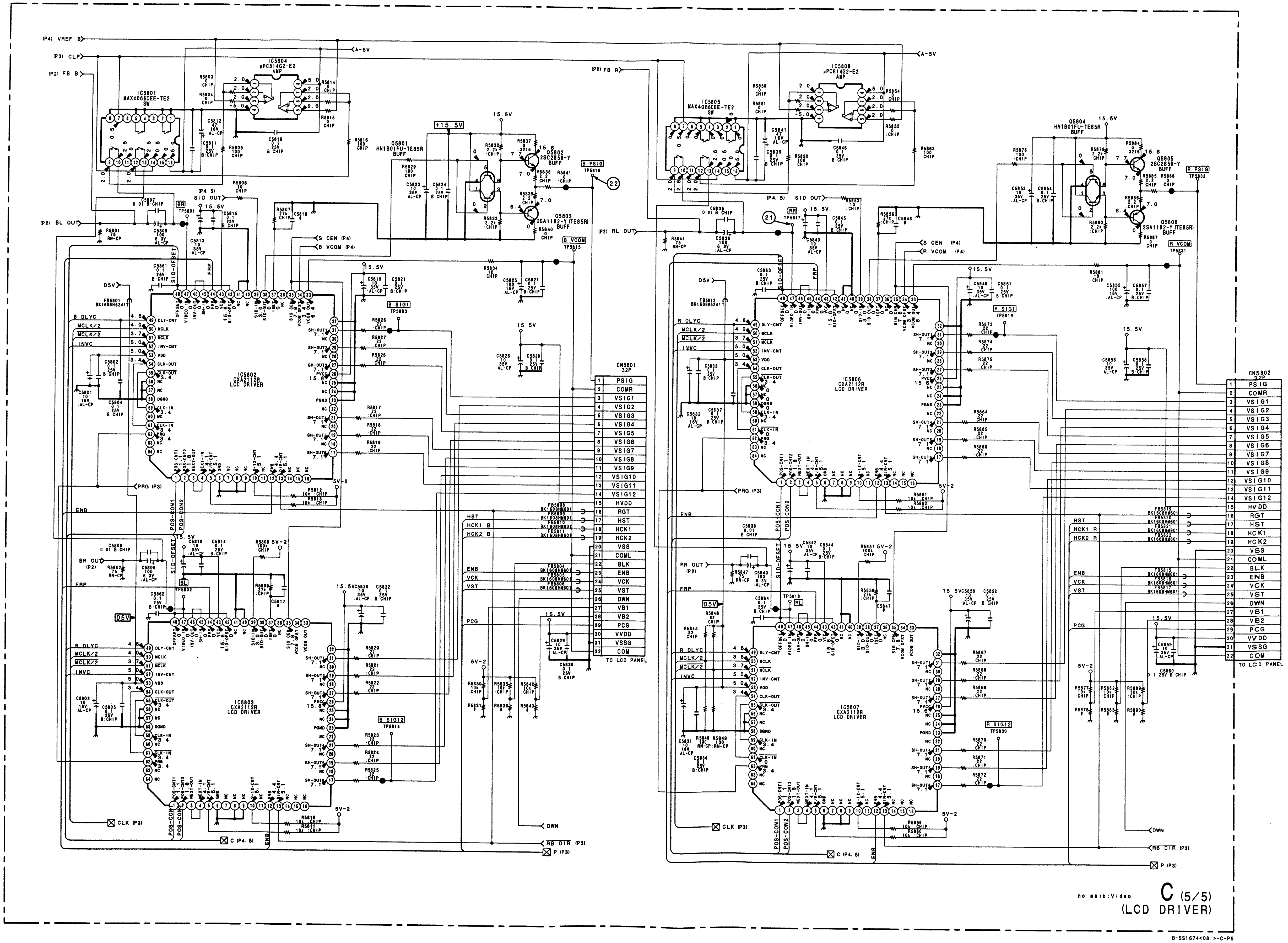
- Refer to page 10-64, 10-65 for Printed Wiring Board
- Refer to page 10-71 for Waveforms
- Refer to page 10-71 for IC Block Diagrams


5V-2
GND
IC5402
MC10H350P
PECL TO TTL
MCLK-N/2
MCLK-P/2
(P1)
HSYNC-N
HSYNC-P
VSYNC-N
VSYNC-P
CLK (P4. 5)
MCLK/2
IC5403
ISPLSI1032E -100LT-CO 1V1
T.G
VSYNC
HSYNC
TP5403
TP5404
SLFR (P4)
FRP
+5V
HCK2
HCK1
HST
ENB
VCK
VST
DIR-CON
RB DIR
SCLK
SDI
TSPEN
SELECT OUT
CLP
SELECT
MODE
SDO
PRG
PCG
PRG (P4. 5)
(P1) SELECT OUT
(P4. 5) CLP
(P1) SELECT
IC5405
IC74VHC240F
BUFF
IC5406
IC74VHC240F
BUFF
HCK1 B
HCK1 G
HCK1 R
HCK2 B
HCK2 G
HCK2 R
FB5401
BK1608HM601
DIR-CON (P4)
RB DIR (P5)
P (P4. 5)
CN5401
8P
WHT
:SMD
SCLK 1
GND 2
MODE 3
PLUG 4
TSPEN 5
SDI 6
SDO 7
VCC 8
no mark:Video
C (3/5)
(T, G, LEVEL SHIFT)
B-SS1674<08.>-C-P3

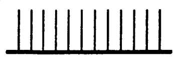
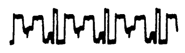
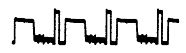
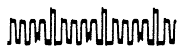
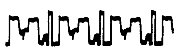
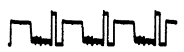
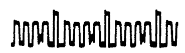
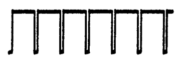
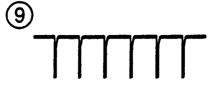
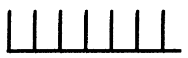
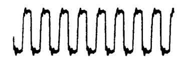
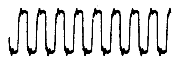
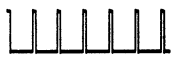
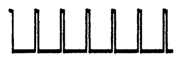
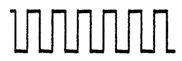
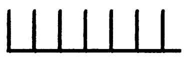
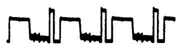
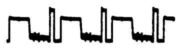
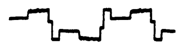
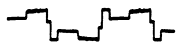
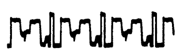
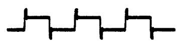
- Refer to page 10-64, 10-65 for Printed Wiring Board
- Refer to page 10-71 for Waveforms
- Refer to page 10-71 for IC Block Diagrams


IC5602 MB88141APFV-ER D/A
IC5605 M62399FP-TE2 D/A
IC5601 TC74VHC08F AND
Q5601 HN1B01FU-T85R BUFF
Q5602 HN1B01FU-TE85R BUFF
IC5606 MAX4066CEE-TE2 SW
IC5603 MAX4066CEE-TE2 SW
IC5604 μPC814G2-E2 AMP
IC5609 TLV431ACDBV2 V REF
IC5607 CXA2112R LCD DRIVER
IC5608 CXA2112R LCD DRIVER
Q5603 HN1B01FU-TE85R BUFF
Q5604 2SC2859-Y BUFF
Q5605 2SA1182-Y (TE85R) BUFF
CN5601 32P
PSIG
COMR
VSIG1
VSIG2
VSIG3
VSIG4
VSIG5
VSIG6
VSIG7
VSIG8
VSIG9
VSIG10
VSIG11
VSIG12
HVDD
RGT
HST
HCK1
HCK2
VSS
COML
BLK
ENB
VCK
VST
DWN
VB1
VB2
PCG
VVDD
VSSG
COM
TO LCD PANEL
12V
5V-2
GND
A-5V
SDA
SCL
CRESET
SLFR
DWN
SCEN
B-VCOM
G-VCOM
R-VCOM
S CEN
B VCOM
R VCOM
SID OUT
G PSIG
G VCOM
G SIG1
G SIG12
GR OUT
GL OUT
FB G
VREF B
CLP
CLK
DIR-CON
no mark:Video
C (4/5)
(T/A LCD DRIVER)
8-SS1674<08 >-C-P4

- Refer to page 10-64, 10-65 for Printed Wiring Board
- Refer to page 10-71 for Waveforms
- Refer to page 10-71 for IC Block Diagrams

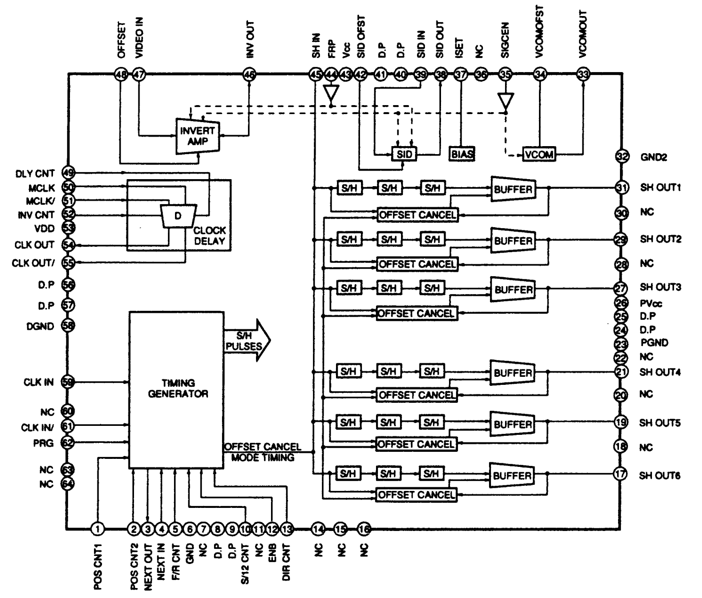

IC5801
MAX4066CEE-TE2
SW
IC5804
μPC814G2-E2
AMP
Q5801
HN1B01FU-TE85R
BUFF
Q5802
2SC2859-Y
BUFF
Q5803
2SA1182-Y(TE85R)
BUFF
IC5802
CXA2112R
LCD DRIVER
IC5803
CXA2112R
LCD DRIVER
IC5805
MAX4066CEE-TE2
SW
IC5808
μPC814G2-E2
AMP
Q5804
HN1B01FU-TE85R
BUFF
Q5805
2SC2859-Y
BUFF
Q5806
2SA1182-Y(TE85R)
BUFF
IC5806
CXA2112R
LCD DRIVER
IC5807
CXA2112R
LCD DRIVER
(P4) VREF B
(P3) CLP
(P2) FB B
(P2) FB R
(P2) BL OUT
(P2) RL OUT
BR OUT (P2)
RR OUT (P2)
A-5V
15.5V
5V-2
D5V
S CEN (P4)
B VCOM (P4)
R VCOM (P4)
SID OUT
B PSIG
R PSIG
B VCOM
R VCOM
B SIG1
R SIG1
B SIG12
R SIG12
PRG (P3)
CLK (P3)
C (P4, 5)
RB DIR (P3)
P (P3)
DWN
CN5801
32P
CN5802
32P
1 PSIG
2 COMR
3 VSIG1
4 VSIG2
5 VSIG3
6 VSIG4
7 VSIG5
8 VSIG6
9 VSIG7
10 VSIG8
11 VSIG9
12 VSIG10
13 VSIG11
14 VSIG12
15 HVDD
16 RGT
17 HST
18 HCK1
19 HCK2
20 VSS
21 COML
22 BLK
23 ENB
24 VCK
25 VST
26 DWN
27 VB1
28 VB2
29 PCG
30 VVDD
31 VSSG
32 COM
TO LCD PANEL
no mark:Video
C (5/5)
(LCD DRIVER)
B-SS1674<08.>-C-P5
1
2
3
4
5
A
B
C
D
E
F
G
H

C Board Waveforms

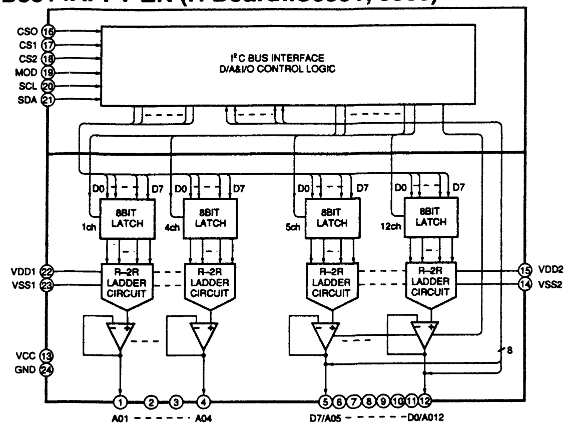
①  5.2Vp-p (H) TP5018 AGC D/A R	②  1.0Vp-p (H) TP5012 RR	③  1.0Vp-p (H) TP5014 GR	④  1.0Vp-p (H) TP5016 BR
⑤  1.0Vp-p (H) TP5013 RL	⑥  1.0Vp-p (H) TP5015 GR	⑦  1.0Vp-p (H) TP5017 BL	⑧  5.2Vp-p (H) TP5403 VSYNC
⑨  5.3Vp-p (H) TP5404 HSYNC	⑩  5.0Vp-p (V) TP5414 CLP	⑪  5.7Vp-p (H) TP5406 HCK1	⑫  5.7Vp-p (H) 5410 HCK2
⑬  5.2Vp-p TP5411 PCG	⑭  5.2Vp-p (H) TP5407 ENB	⑮  5.1Vp-p (H) TP5408 VCK	⑯  5.1Vp-p (H) TP5409 VST
⑰  1.0Vp-p (H) TP5602 G1	⑱  1.0Vp-p (H) TP5603 G2	⑲  10.0Vp-p (H) TP5605 G SIG1	⑳  10.0Vp-p (X) TP5616 G SIG 12
㉑  2.5Vp-p (H) TP5817 RR	㉒  9.5Vp-p (H) TP5816 B PSIG		

C ,H Boards IC Block Diagrams

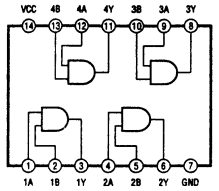
CXA2112R-T6 (C Board:IC5501, 5502, 5301, 5302, 5304, 5305)


OFFSET
VIDEO IN
INV OUT
SH IN
FRP
Vcc
SID OFST
D.P
D.P
SID IN
SID OUT
ISET
NC
SIDCEN
VCOMOFST
VCOMOUT
INVERT AMP
SID
BIAS
VCOM
DLY CNT
MCLK
MCLK/
INV CNT
VDD
CLK OUT
CLK OUT/
D.P
D.P
DGND
CLOCK DELAY
D
S/H PULSES
CLK IN
NC
CLK IN/
PRG
NC
NC
TIMING GENERATOR
OFFSET CANCEL MODE TIMING
S/H
BUFFER
OFFSET CANCEL
GND2
SH OUT1
NC
SH OUT2
NC
SH OUT3
PVcc
D.P
D.P
PGND
NC
SH OUT4
NC
SH OUT5
NC
SH OUT6
POS CNT1
POS CNT2
NEXT OUT
NEXT IN
F/R CNT
GND
NC
D.P
D.P
S/12 CNT
NC
ENB
DIR CNT
NC
NC
NC

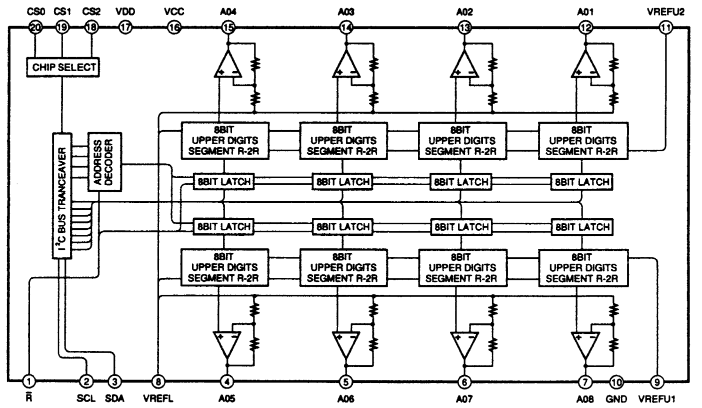
MB8814APFV-ER (C Board:IC5401)
MB8814APFV-ER (H Board:IC6301, 6303)


CS0
CS1
CS2
MOD
SCL
SDA
I²C BUS INTERFACE
D/A&I/O CONTROL LOGIC
D0
D7
8BIT LATCH
1ch
4ch
5ch
12ch
R-2R LADDER CIRCUIT
VDD1
VSS1
VDD2
VSS2
VCC
GND
A01
A04
D7/A05
D0/A012

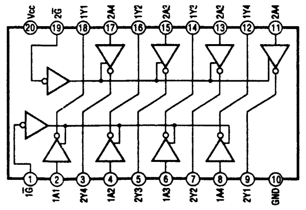
TC74VHC08F (C Board:IC5404)


VCC
4B
4A
4Y
3B
3A
3Y
1A
1B
1Y
2A
2B
2Y
GND

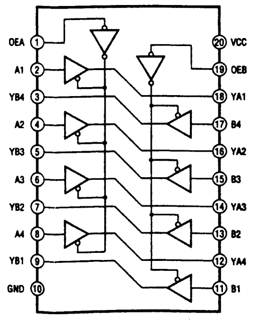
M62399FP-TE2 (C Board:IC5402)

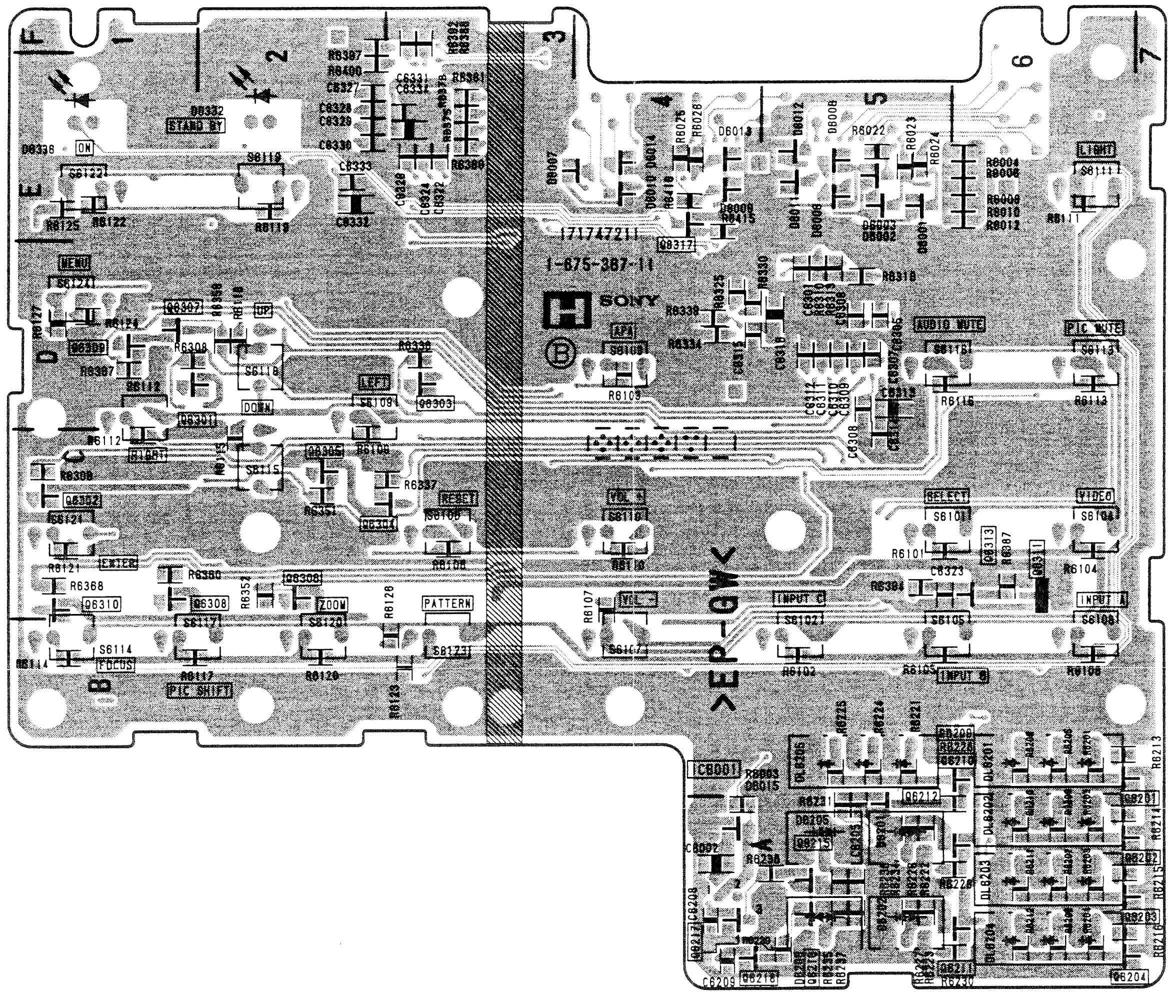

CS0
CS1
CS2
VDD
VCC
A04
A03
A02
A01
VREFU2
CHIP SELECT
I²C BUS TRANCEAVER
ADDRESS DECODER
8BIT UPPER DIGITS SEGMENT R-2R
8BIT LATCH
SCL
SDA
VREFL
A05
A06
A07
A08
GND
VREFU1

TC74VHC240F (C Board:IC5215, 5216)


Vcc
2G
1Y1
2A4
1Y2
2A3
1Y3
2A2
1Y4
2A1
1G
1A1
2Y4
1A2
2Y3
1A3
2Y2
1A4
2Y1
GND

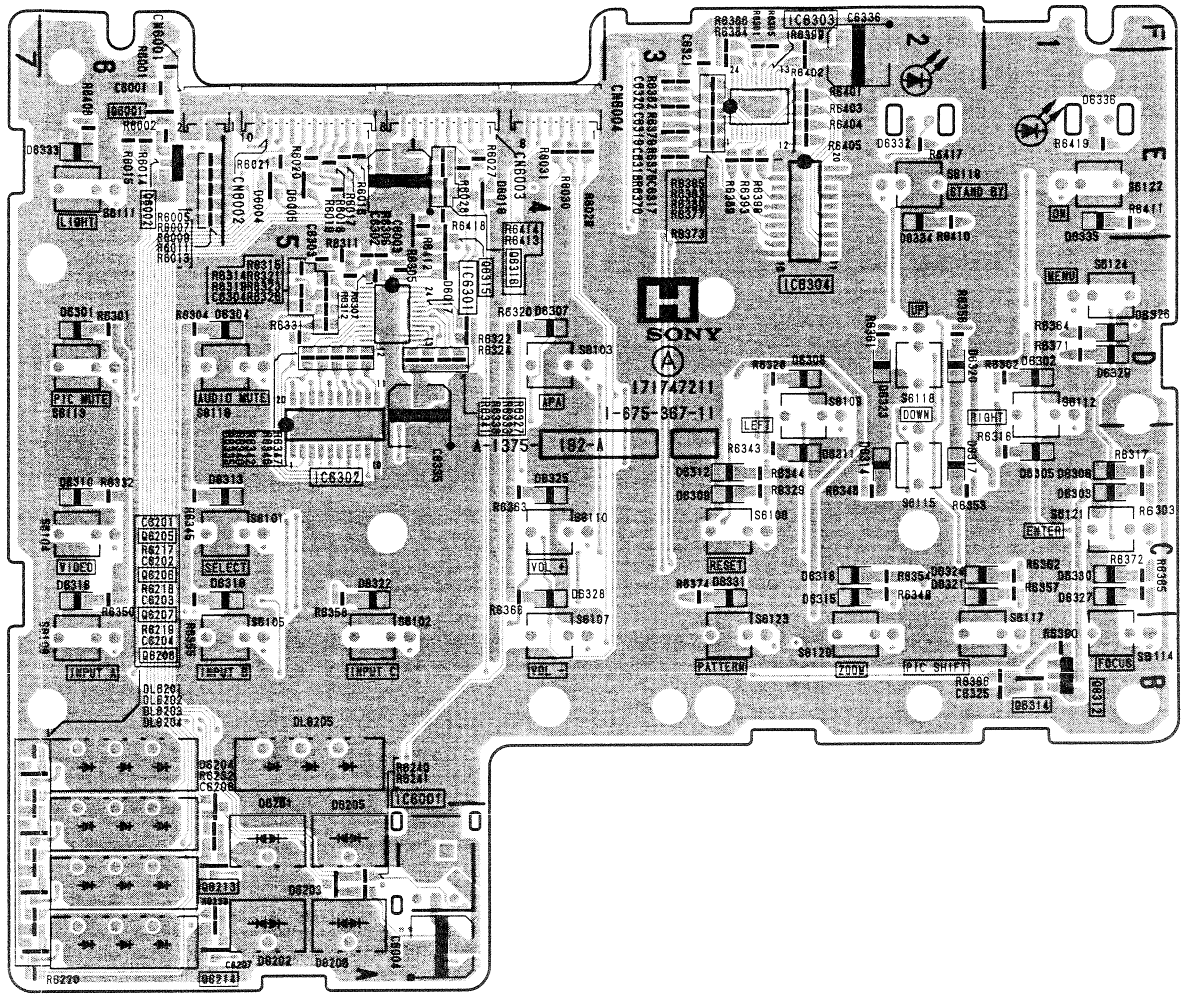
TC74VHC244F (H Board:IC6302, 6304)


OEA
A1
YB4
A2
YB3
A3
YB2
A4
YB1
GND
VCC
OEB
YA1
B4
YA2
B3
YA3
B2
YA4
B1



H – B SIDE –

SUFFIX ; -11



H – A SIDE –

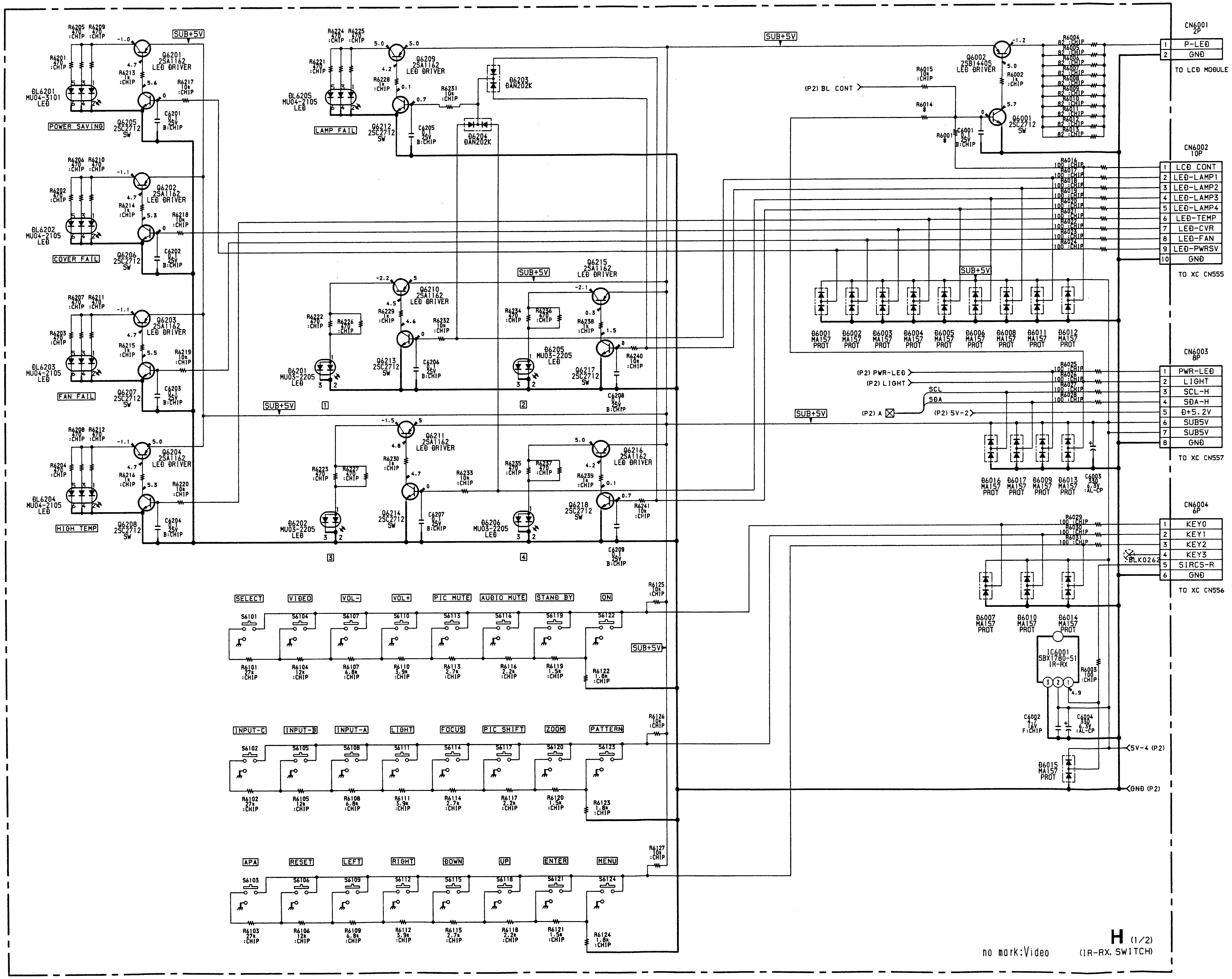
SUFFIX ; -11

–
H
–
1-675-897-11

IC6001	B-4
IC6301	D-4
IC6302	C-5
IC6303	F-2
IC6304	D2
Q6001	E-6
Q6002	E-6
Q6201	* A-6
Q6202	* A-6
Q6203	* A-6
Q6204	* A-6
Q6205	C-6
Q6206	C-6
Q6207	C-6
Q6208	B-6
Q6209	* B-6
Q6210	* B-6
Q6211	* A-6
Q6212	* A-5
Q6213	A-5
Q6214	A-5
Q6215	* A-5
Q6216	* A-5
Q6217	* A-4
Q6218	* A-4
Q6301	* D-1
Q6302	* C-1
Q6303	* D-3
Q6304	* C-2
Q6305	* C-2
Q6306	* C-2
Q6307	* D-1
Q6308	* C-2
Q6309	* D-1
Q6310	* C-1
Q6311	* C-6
Q6312	B-1
Q6313	* C-6
Q6314	B-1
Q6315	D-4
Q6316	D-4
Q6317	* D-4

*:B Side mount

- Refer to page 10-72 for Printed Wiring Board
- Refer to page 10-71 for IC Block Diagrams


POWER SAVING
COVER FAIL
FAN FAIL
HIGH TEMP
LAMP FAIL
SUB+5V
Q6201 2SA1162 LED DRIVER
Q6202 2SA1162 LED DRIVER
Q6203 2SA1162 LED DRIVER
Q6204 2SA1162 LED DRIVER
Q6205 2SC2712 SW
Q6206 2SC2712 SW
Q6207 2SC2712 SW
Q6208 2SC2712 SW
Q6209 2SA1162 LED DRIVER
Q6210 2SA1162 LED DRIVER
Q6211 2SA1162 LED DRIVER
Q6212 2SC2712 SW
Q6213 2SC2712 SW
Q6214 2SC2712 SW
Q6215 2SA1162 LED DRIVER
Q6216 2SA1162 LED DRIVER
Q6217 2SC2712 SW
Q6218 2SC2712 SW
D6203 DAN202K
D6204 DAN202K
BL6201 MU04-3101 LED
BL6202 MU04-2105 LED
BL6203 MU04-2105 LED
BL6204 MU04-2105 LED
BL6205 MU04-2105 LED
D6201 MU03-2205 LED
D6202 MU03-2205 LED
D6205 MU03-2205 LED
D6206 MU03-2205 LED
Q6001 2SC2712 SW
Q6002 2SB1440S LED DRIVER
(P2) BL CONT
D6001 MA157 PROT
D6002 MA157 PROT
D6003 MA157 PROT
D6004 MA157 PROT
D6005 MA157 PROT
D6006 MA157 PROT
D6008 MA157 PROT
D6011 MA157 PROT
D6012 MA157 PROT
(P2) PWR-LED
(P2) LIGHT
SCL
SDA
(P2) A
(P2) 5V-2
D6016 MA157 PROT
D6017 MA157 PROT
D6009 MA157 PROT
D6013 MA157 PROT
D6007 MA157 PROT
D6010 MA157 PROT
D6014 MA157 PROT
D6015 MA157 PROT
IC6001 SBX1780-51 IR-RX
BLK0262
5V-4 (P2)
GND (P2)
CN6001 2P
1 P-LED
2 GND
TO LCD MODULE
CN6002 10P
1 LCD CONT
2 LED-LAMP1
3 LED-LAMP2
4 LED-LAMP3
5 LED-LAMP4
6 LED-TEMP
7 LED-CVR
8 LED-FAN
9 LED-PWRSV
10 GND
TO XC CN555
CN6003 8P
1 PWR-LED
2 LIGHT
3 SCL-H
4 SDA-H
5 D+5.2V
6 SUB5V
7 SUB5V
8 GND
TO XC CN557
CN6004 6P
1 KEY0
2 KEY1
3 KEY2
4 KEY3
5 SIRCS-R
6 GND
TO XC CN556
SELECT
VIDEO
VOL-
VOL+
PIC MUTE
AUDIO MUTE
STAND BY
ON
INPUT-C
INPUT-B
INPUT-A
LIGHT
FOCUS
PIC SHIFT
ZOOM
PATTERN
APA
RESET
LEFT
RIGHT
DOWN
UP
ENTER
MENU
S6101
S6102
S6103
S6104
S6105
S6106
S6107
S6108
S6109
S6110
S6111
S6112
S6113
S6114
S6115
S6116
S6117
S6118
S6119
S6120
S6121
S6122
S6123
S6124
no mark:Video
H (1/2)
(IR-RX SWITCH)
B-SS1647<09.>-H. -P1

A	B	C	D	E	F	G	H

- Refer to page 10-72 for Printed Wiring Board
- Refer to page 10-71 for IC Block Diagrams

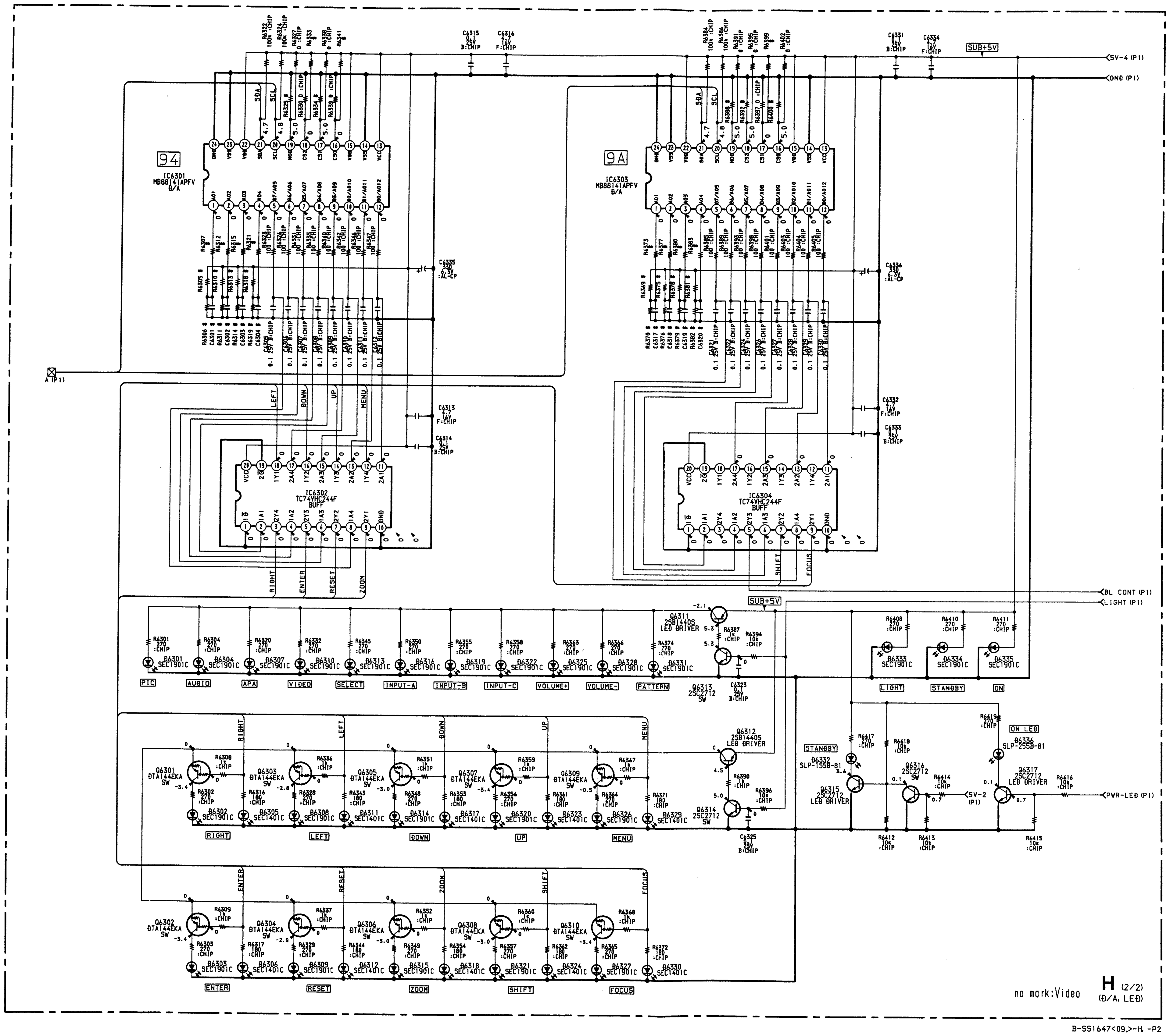
1

2

3

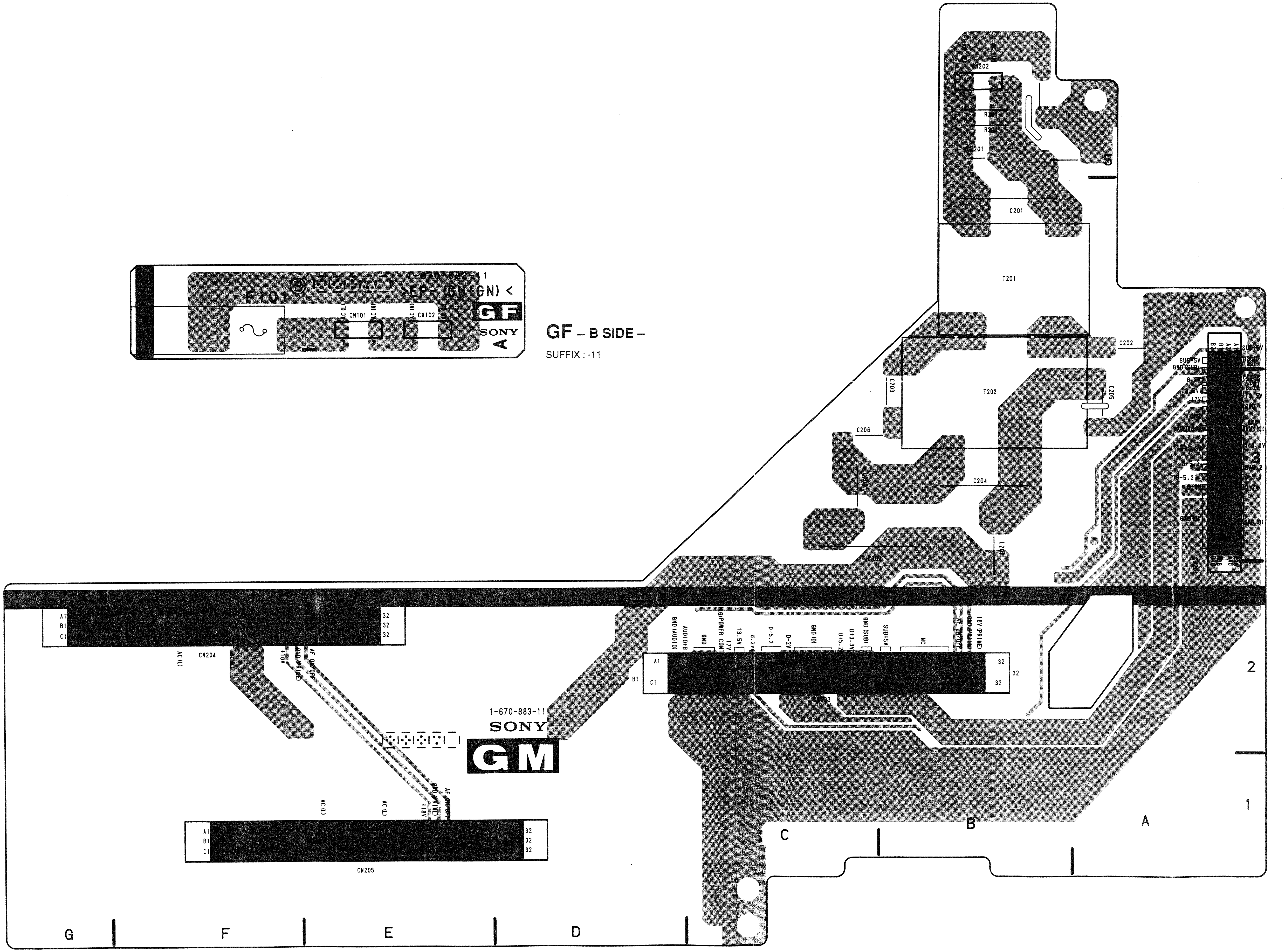
4

5


94
IC6301
MB88141APFV
D/A
9A
IC6303
MB88141APFV
D/A
IC6302
TC74VHC244F
BUFF
IC6304
TC74VHC244F
BUFF
SDA
SCL
C6335 330 6.3V :AL-CP
C6334 330 6.3V :AL-CP
C6313 4.7 16V F:CHIP
C6314 0.1 25V B:CHIP
C6332 4.7 16V F:CHIP
C6333 0.1 25V B:CHIP
SUB+5V
SV-4 (P1)
GND (P1)
A (P1)
BL CONT (P1)
LIGHT (P1)
PWR-LED (P1)
5V-2 (P1)
LEFT
DOWN
UP
MENU
RIGHT
ENTER
RESET
ZOOM
SHIFT
FOCUS
Q6311 2SB1440S LED DRIVER
Q6312 2SB1440S LED DRIVER
Q6313 2SC2712 SW
Q6314 2SC2712 SW
C6323 0.1 25V B:CHIP
C6325 0.1 25V B:CHIP
PIC
AUDIO
APA
VIDEO
SELECT
INPUT-A
INPUT-B
INPUT-C
VOLUME+
VOLUME-
PATTERN
D6301 SEC1901C
D6304 SEC1901C
D6307 SEC1901C
D6310 SEC1901C
D6313 SEC1901C
D6316 SEC1901C
D6319 SEC1901C
D6322 SEC1901C
D6325 SEC1901C
D6328 SEC1901C
D6331 SEC1901C
D6333 SEC1901C
D6334 SEC1901C
D6335 SEC1901C
LIGHT
STANDBY
ON
STANDBY
D6332 SLP-155B-81
Q6315 2SC2712 LED DRIVER
Q6316 2SC2712 SW
ON LED
D6336 SLP-255B-81
Q6317 2SC2712 LED DRIVER
Q6301 DTA144EKA SW
Q6303 DTA144EKA SW
Q6305 DTA144EKA SW
Q6307 DTA144EKA SW
Q6309 DTA144EKA SW
Q6302 DTA144EKA SW
Q6304 DTA144EKA SW
Q6306 DTA144EKA SW
Q6308 DTA144EKA SW
Q6310 DTA144EKA SW
RIGHT
LEFT
DOWN
UP
MENU
ENTER
RESET
ZOOM
SHIFT
FOCUS
no mark:Video
H (2/2)
(D/A, LED)

B-SS1647<09.>-H. -P2

GF, GM


1-670-882-11
>EP- (GV+GN) <
F101
CN101
CN102
AC (L)
AC (N)
GF
SONY
A
CN202
R201
R202
C201
T201
T202
C202
C203
C205
C206
C204
C207
L201
L202
CN201
SUB+5V
GND (SUB)
6.2V
13.5V
17V
GND (AUDIO)
D+3.3V
D+5.2
D-5.2
D-2V
GND (D)
AUDIO+B
GND
18V POWER CONT
NC
18V (PRIME)
GND (PRIME)
AF ON/OFF
+18V
CN203
CN204
CN205
1-670-883-11
SONY
GM
A1
B1
C1
32
1
2
3
4
5
A
B
C
D
E
F
G

GF – B SIDE –

SUFFIX ; -11

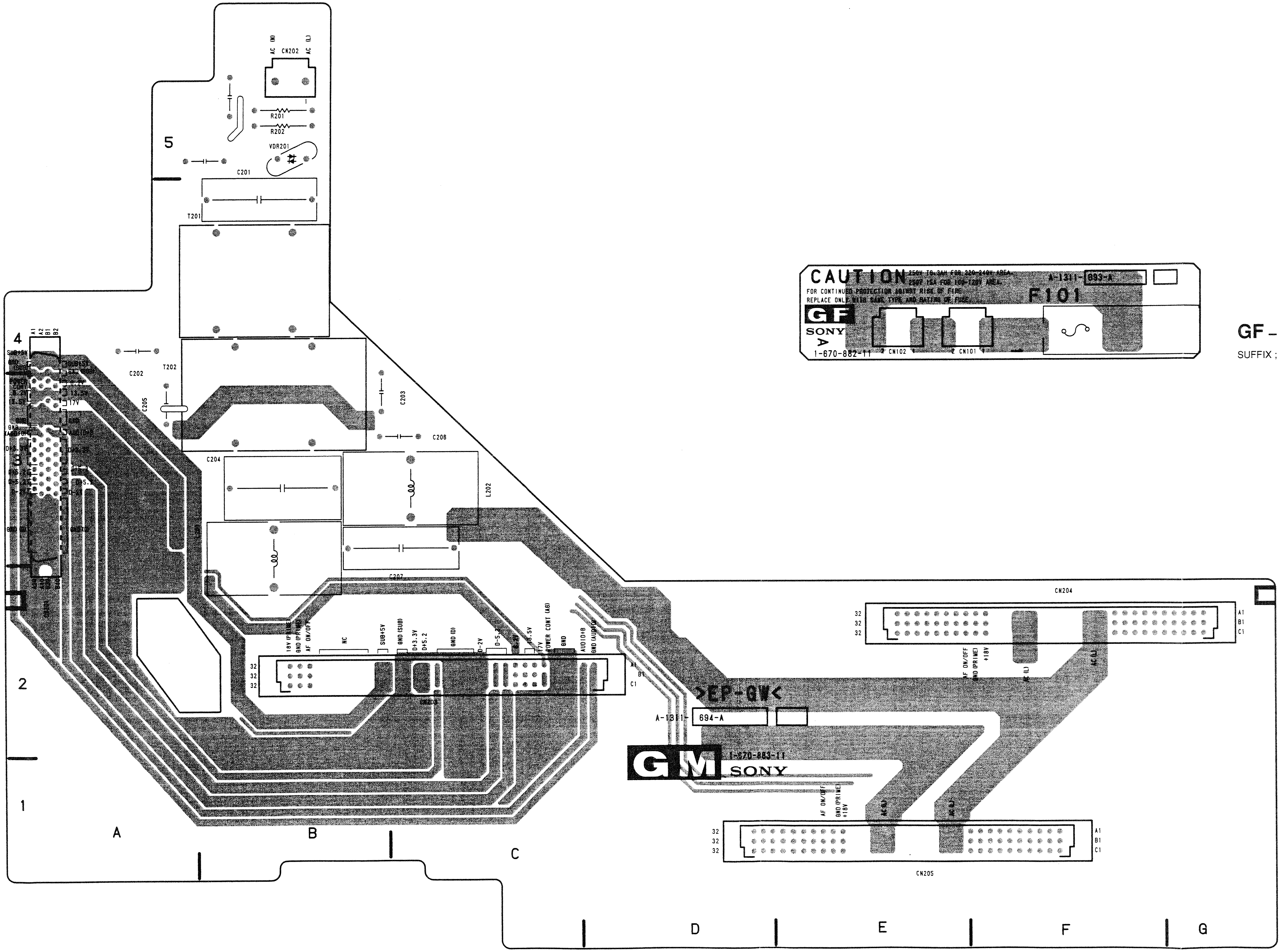
GM – B SIDE –

SUFFIX ; -11

CAUTION
250V T6.3AH FOR 220-240V AREA.
250V T5A FOR 100-120V AREA.
FOR CONTINUED PROTECTION AGAINST RISK OF FIRE,
REPLACE ONLY WITH SAME TYPE AND RATING OF FUSE.
A-1311-893-A
F101
GF
SONY
A
1-670-882-11
CN102
CN101

GF – A SIDE –

SUFFIX ; -11


AC (N)
CN202
AC (L)
R201
R202
VDR201
C201
T201
C202
T202
C205
C203
C208
C204
L202
C207
CN204
CN205
CN203
>EP-GW<
A-1311-694-A
1-670-883-11
GM
SONY
18V (PRIME)
GND (PRIME)
AF ON/OFF
NC
SUB+5V
GND (SUB)
D+3.3V
D+5.2
GND (D)
D-2V
D-5.2
8.5V
17V
POWER CONT (AB)
GND
AUDIO+18
GND (AUDIO)
AC (L)
AC (N)
+18V
32
A1
B1
C1
1
2
3
4
5
A
B
C
D
E
F
G

GM – A SIDE –

SUFFIX ; -11

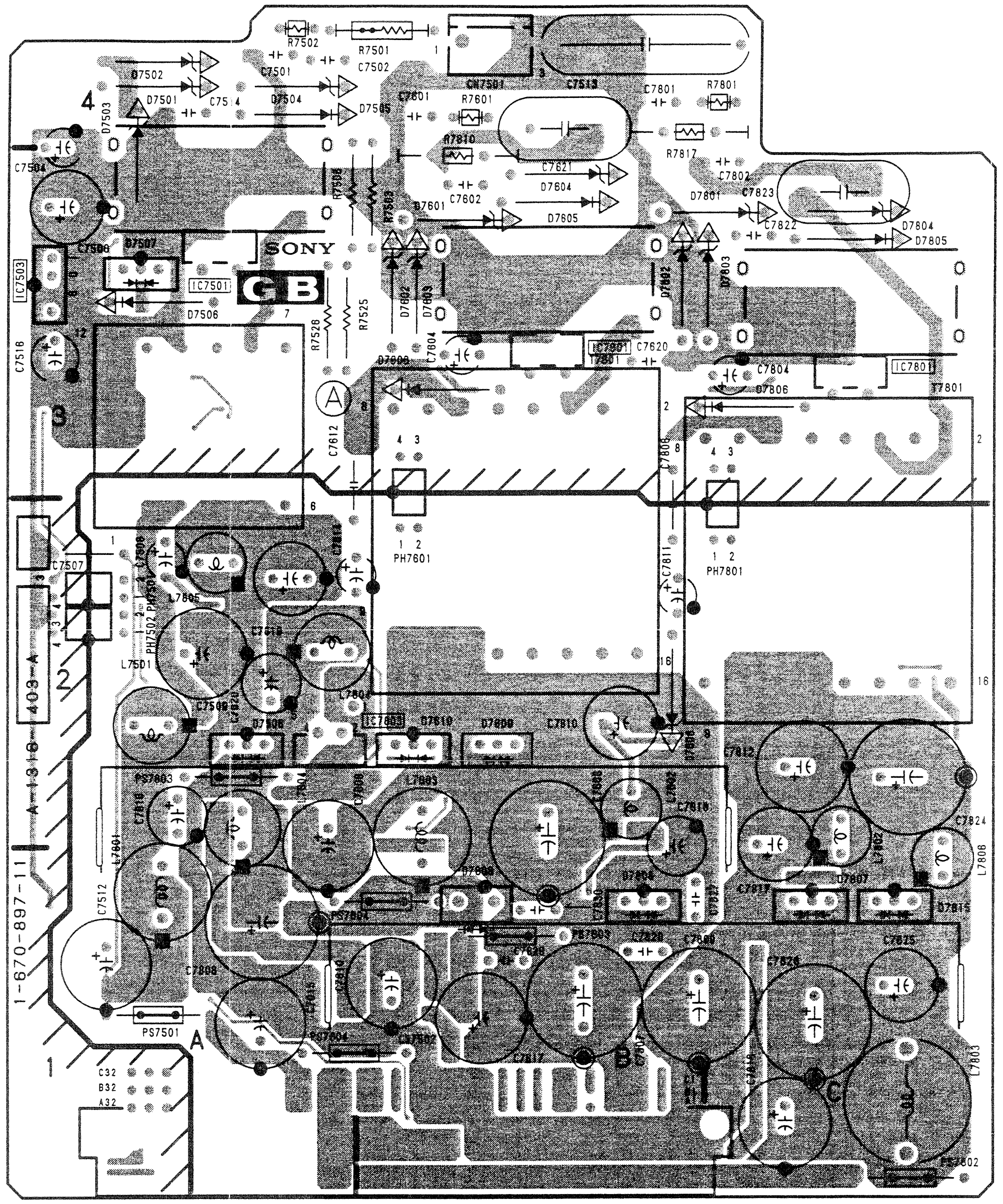
GB

GB

1-670-897-11

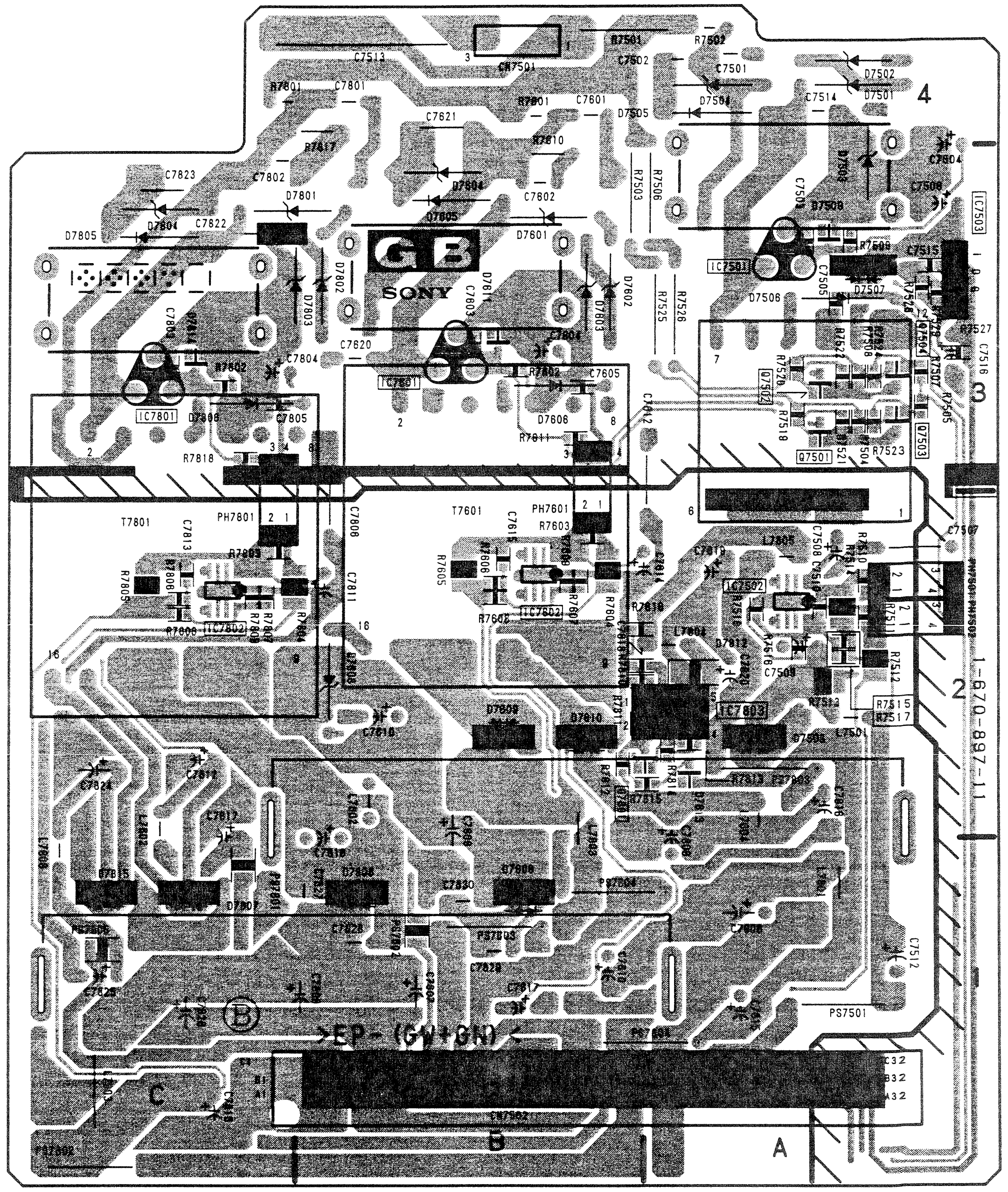
D7501	* A-4
D7502	* A-4
D7503	* A-4
D7504	* A-3
D7505	* A-3
D7506	* B-4
D7507	* B-4
D7508	* D-4
D7509	* A-4
D7601	* A-3
D7602	* B-3
D7603	* B-3
D7604	* A-2
D7605	* A-2
D7606	* B-3
D7608	* C-2
D7609	* C-3
D7610	* C-3
D7611	* B-2
D7801	* A-2
D7802	* B-2
D7803	* B-2
D7804	* A-1
D7805	* A-1
D7806	* B-1
D7807	* D-1
D7808	* D-2
D7809	* D-3
D7812	* C-3
D7813	* D-3
D7814	* B-1
D7815	* D-1
IC7501	* B-4
IC7502	* C-4
IC7503	* B-4
IC7601	* B-2
IC7602	* C-3
IC7801	* B-1
IC7802	* C-1
IC7803	* C-3
Q7501	* B-4
Q7502	* B-4
Q7503	* B-4
Q7504	* B-4
Q7801	* D-3

*:B Side mount


SONY
GB
1-670-897-11
A-1316-403-A
4
3
2
1
A
B
C
PH7601
PH7801
PS7501
PS7802

GB – A SIDE –

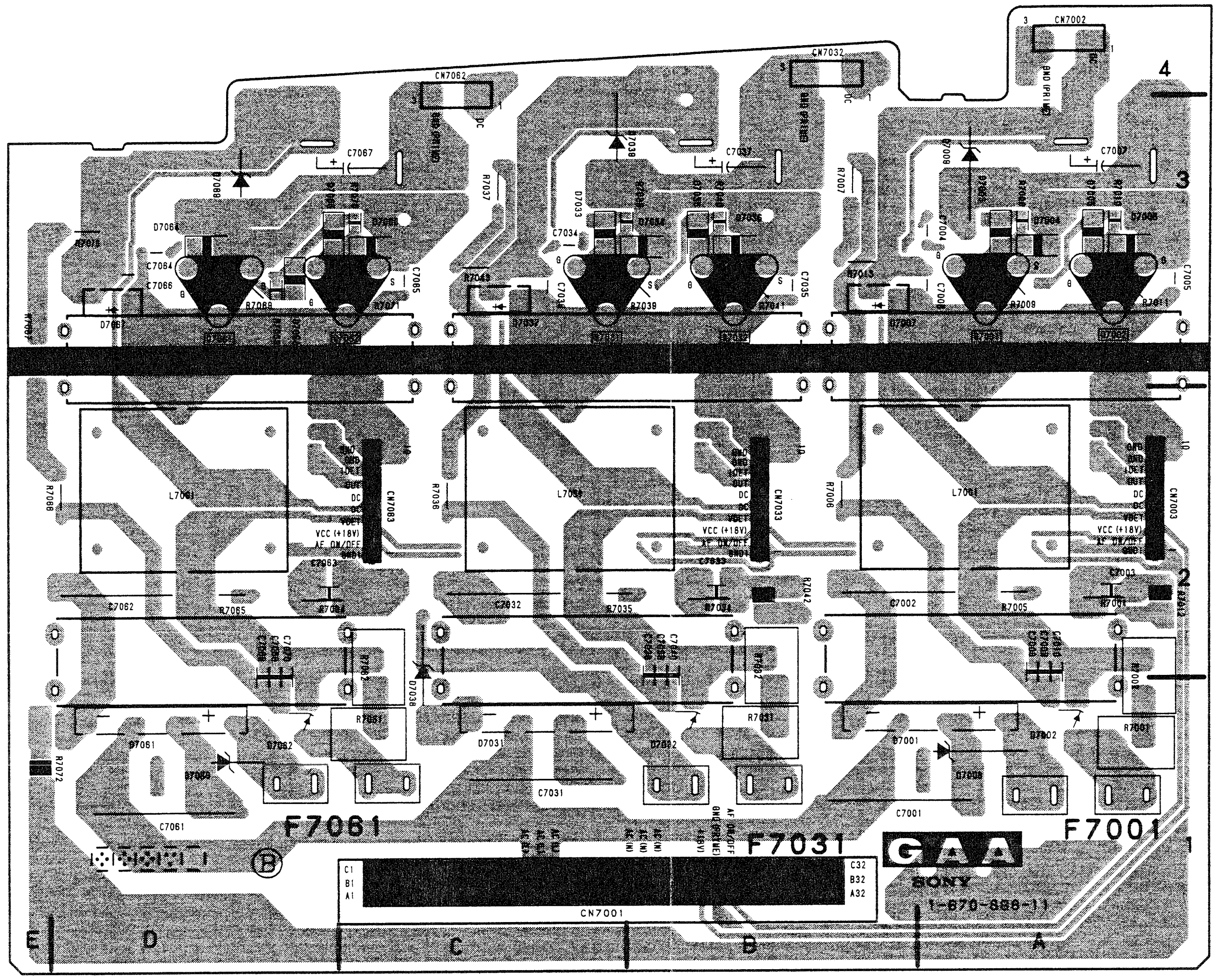
SUFFIX ; -11


GB
SONY
1-670-897-11
4
3
2
A
B
C
EP-(GW+GN)
PS7501
PS7802

GB – B SIDE –

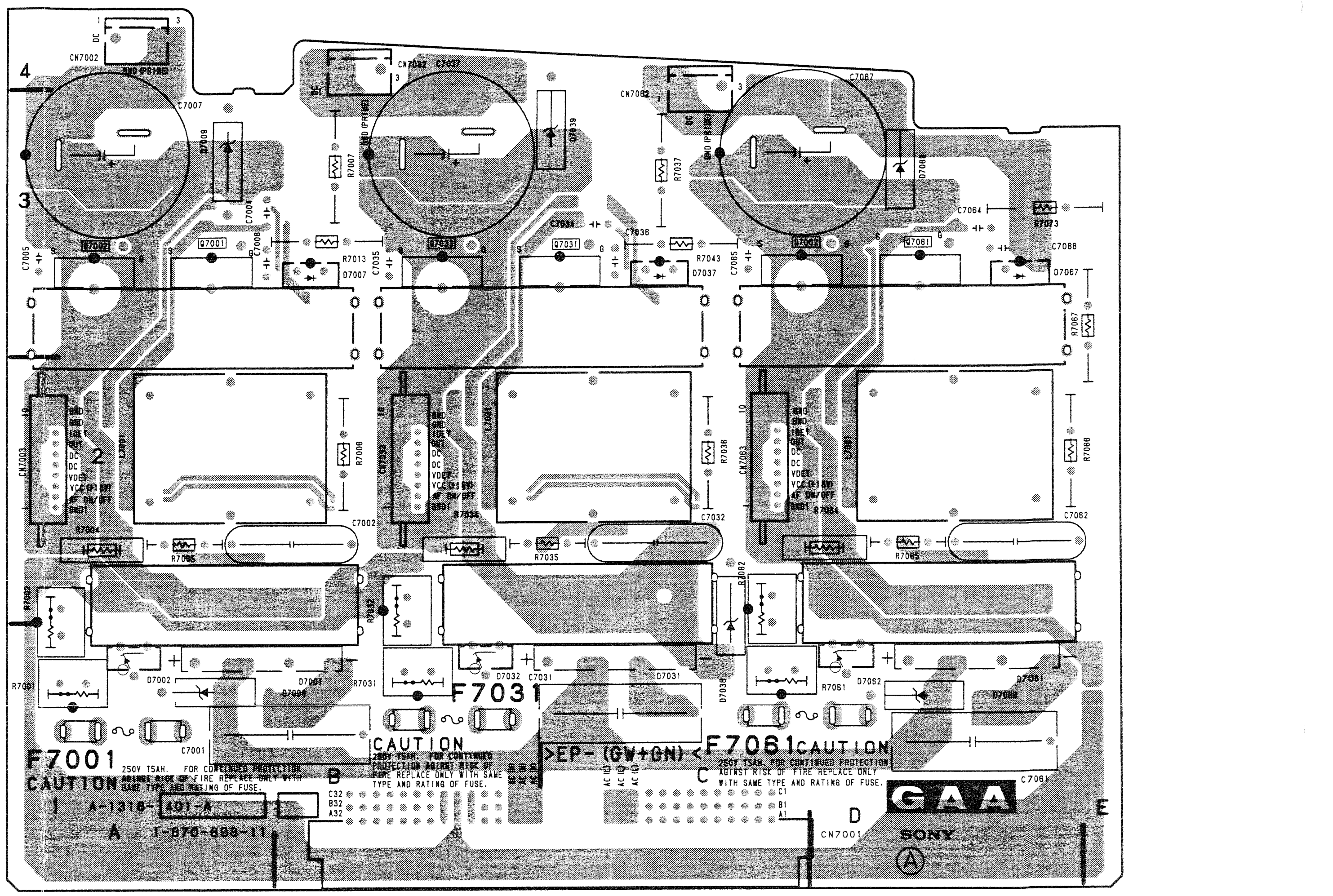
SUFFIX ; -11

10-78


CN7002
CN7032
CN7062
F7061
F7031
F7001
GAA
SONY
1-670-898-11
CN7001
A
B
C
D
E
1
2
3
4

GAA - B SIDE -

SUFFIX ; -11


CN7002
CN7032
CN7062
F7001
F7031
F7061
CAUTION
250V T5AH. FOR CONTINUED PROTECTION AGAINST RISK OF FIRE REPLACE ONLY WITH SAME TYPE AND RATING OF FUSE.
>EP-(GW+GN)<
A-1316-401-A
1-670-898-11
GAA
SONY
CN7001
A
B
C
D
E
1
2
3
4

GAA - A SIDE -

SUFFIX ; -11

GAA

1-670-898-11

D7001	*D-5	Q7001	*B-5
D7002	*D-6	Q7002	*B-6
D7003	*A-5	Q7031	*B-3
D7004	*B-6	Q7032	*B-4
D7005	*A-6	Q7061	*B-2
D7006	*B-6	Q7062	*B-2
D7007	*B-5		
D7008	*D-5		
D7009	*A-5		
D7031	*D-3		
D7032	*D-4		
D7033	*A-3		
D7034	*B-4		
D7035	*A-4		
D7036	*B-4		
D7037	*B-3		
D7038	*D-3		
D7039	*A-4		
D7061	*D-1		
D7062	*D-2		
D7063	*B-2		
D7064	*B-1		
D7065	*A-2		
D7066	*B-2		
D7067	*B-1		
D7068	*D-1		
D7069	*A-2		

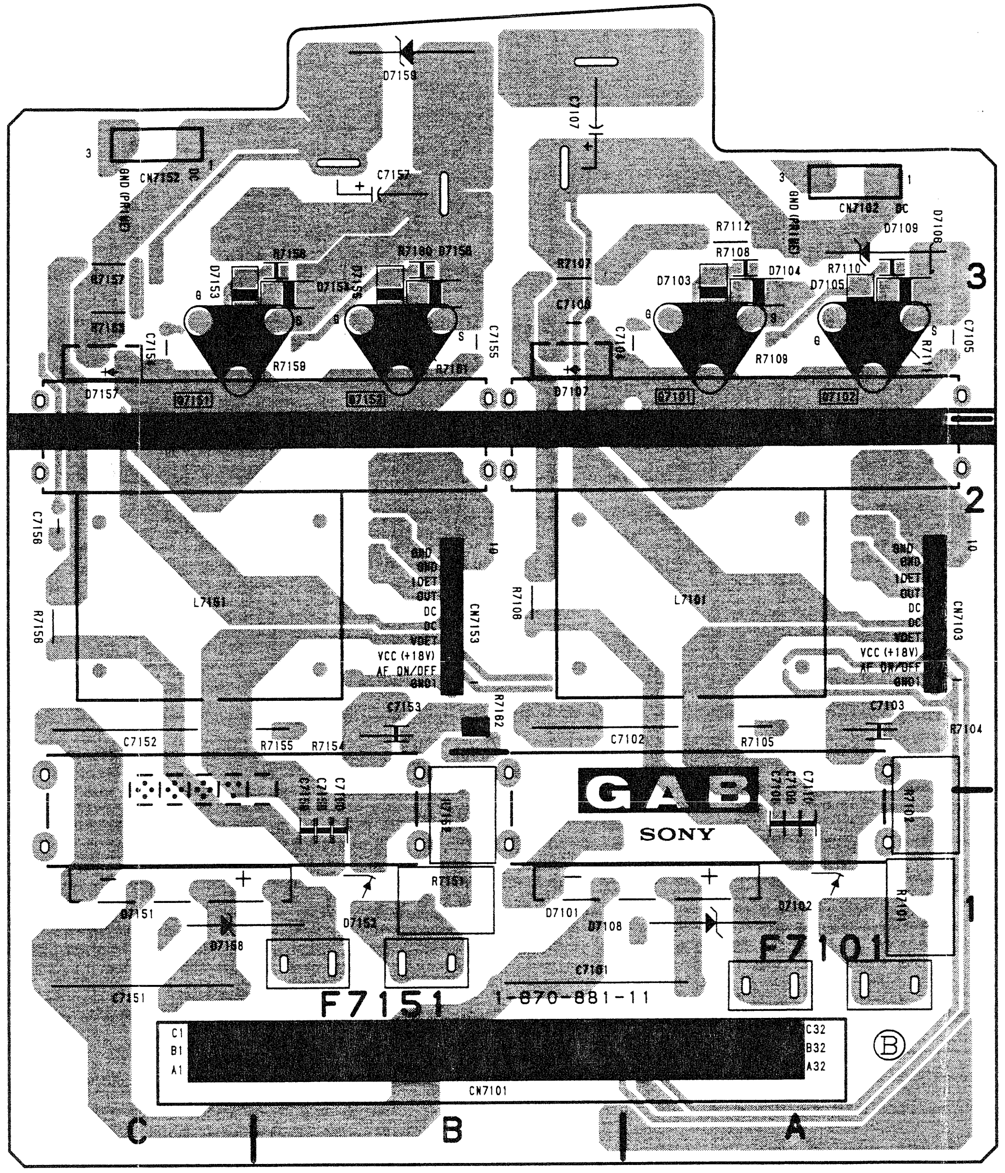
*:B Side mount

GAB

1-670-881-11

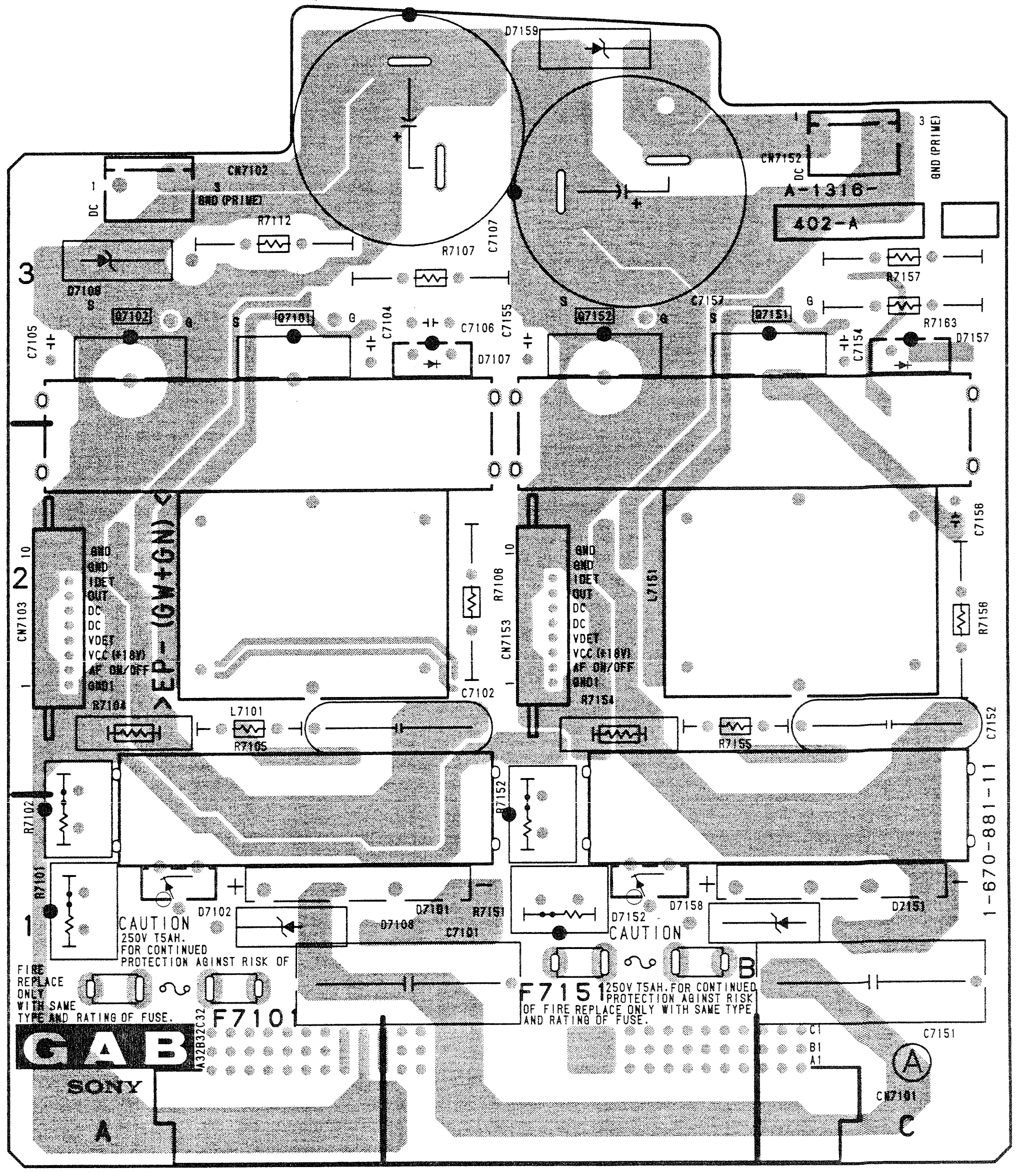
D7101	* D-3
D7102	* D-4
D7103	* B-3
D7104	* B-3
D7105	* B-4
D7106	* B-4
D7107	* B-3
D7108	* D-3
D7109	* A-4
D7151	* D-1
D7152	* D-2
D7153	* B-1
D7154	* B-2
D7155	* B-2
D7156	* B-2
D7157	* A-2
D7158	* D-1
D7159	* A-2
Q7101	* B-3
Q7102	* B-4
Q7151	* B-1
Q7152	* B-2

*:B Side mount


CN7152
GND (PRIME)
DC
CN7102
D7109
D7159
C7157
C7107
R7112
R7108
D7104
D7103
D7105
R7110
Q7151
Q7152
Q7101
Q7102
D7153
D7154
D7155
D7156
D7157
D7107
C7105
C7155
C7156
R7156
L7151
L7101
CN7153
CN7103
GND
IDET
OUT
DC
VDET
VCC (+18V)
AF ON/OFF
GND1
C7152
C7153
C7102
C7103
R7155
R7154
R7105
R7104
R7182
GAB
SONY
D7151
D7152
D7158
D7101
D7102
D7108
C7151
C7101
F7151
F7101
1-670-881-11
CN7101
C1
B1
A1
C32
B32
A32
Ⓑ
C
B
A
1
2
3

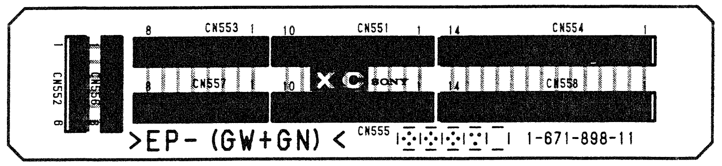
GAB – B SIDE –

SUFFIX ; -11


D7159
CN7102
GND (PRIME)
DC
CN7152
A-1316-
402-A
R7112
R7107
C7107
R7157
R7163
D7157
D7108
Q7102
Q7101
Q7152
Q7151
C7104
C7106
C7155
C7154
D7107
C7105
C7156
R7158
CN7103
CN7153
R7108
R7106
L7151
L7101
GND
IDET
OUT
DC
VDET
VCC (+18V)
AF ON/OFF
GND1
>EP-(GW+GN)<
R7104
R7105
R7154
R7155
C7102
C7152
R7102
R7101
R7152
R7151
D7102
D7101
D7152
D7158
D7151
C7101
C7151
CAUTION
250V T5AH.
FOR CONTINUED
PROTECTION AGINST RISK OF
FIRE
REPLACE ONLY WITH SAME TYPE AND RATING OF FUSE.
F7101
F7151
250V T5AH. FOR CONTINUED PROTECTION AGINST RISK OF FIRE REPLACE ONLY WITH SAME TYPE AND RATING OF FUSE.
GAB
SONY
CN7101
1-670-881-11
Ⓐ
A
B
C
1
2
3

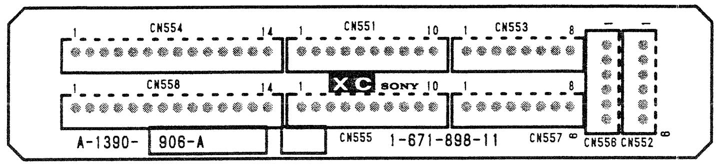
GAB – A SIDE –

SUFFIX ; -11


CN553
CN551
CN554
CN557
CN558
CN552
CN556
XC SONY
>EP- (GW+GN) <
CN555
1-671-898-11

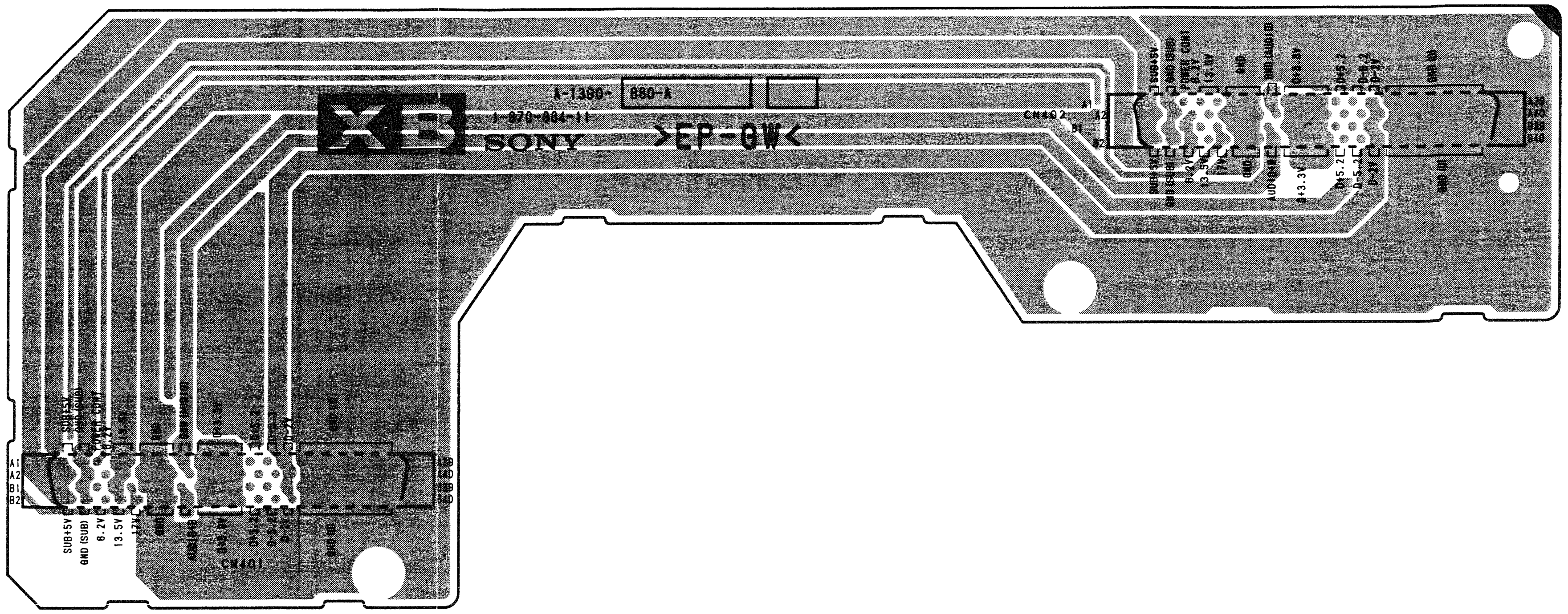
XC – B SIDE –

SUFFIX ; -11


CN554
CN551
CN553
CN558
XC SONY
A-1390- 906-A
CN555
1-671-898-11
CN557
CN556
CN552

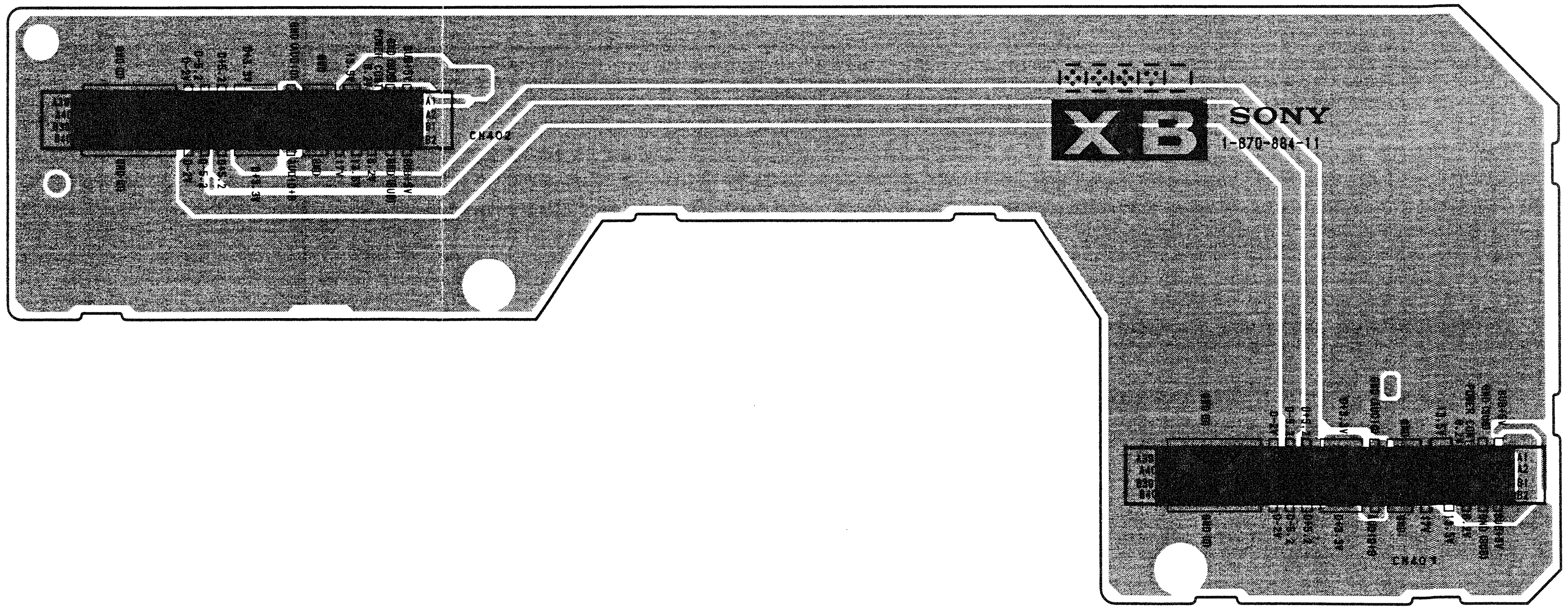
XC – A SIDE –

SUFFIX ; -11


XB
A-1390- 880-A
1-870-884-11
SONY
>EP-GW<
CN402
CN401
SUB+5V
GND (SUB)
8.2V
13.5V

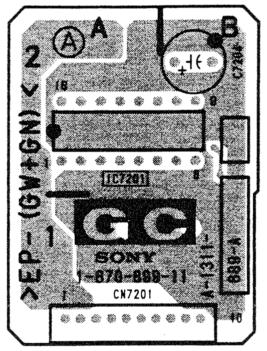
XB – A SIDE –

SUFFIX ; -11


XB
SONY
1-870-884-11
CN402
CN401

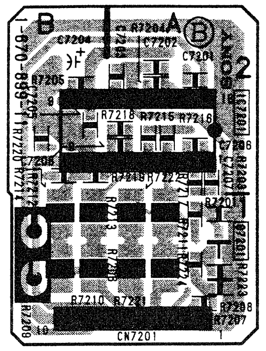
XB – B SIDE –

SUFFIX ; -11


A
B
2
1
IC7201
C7204
CN7201
GC
SONY

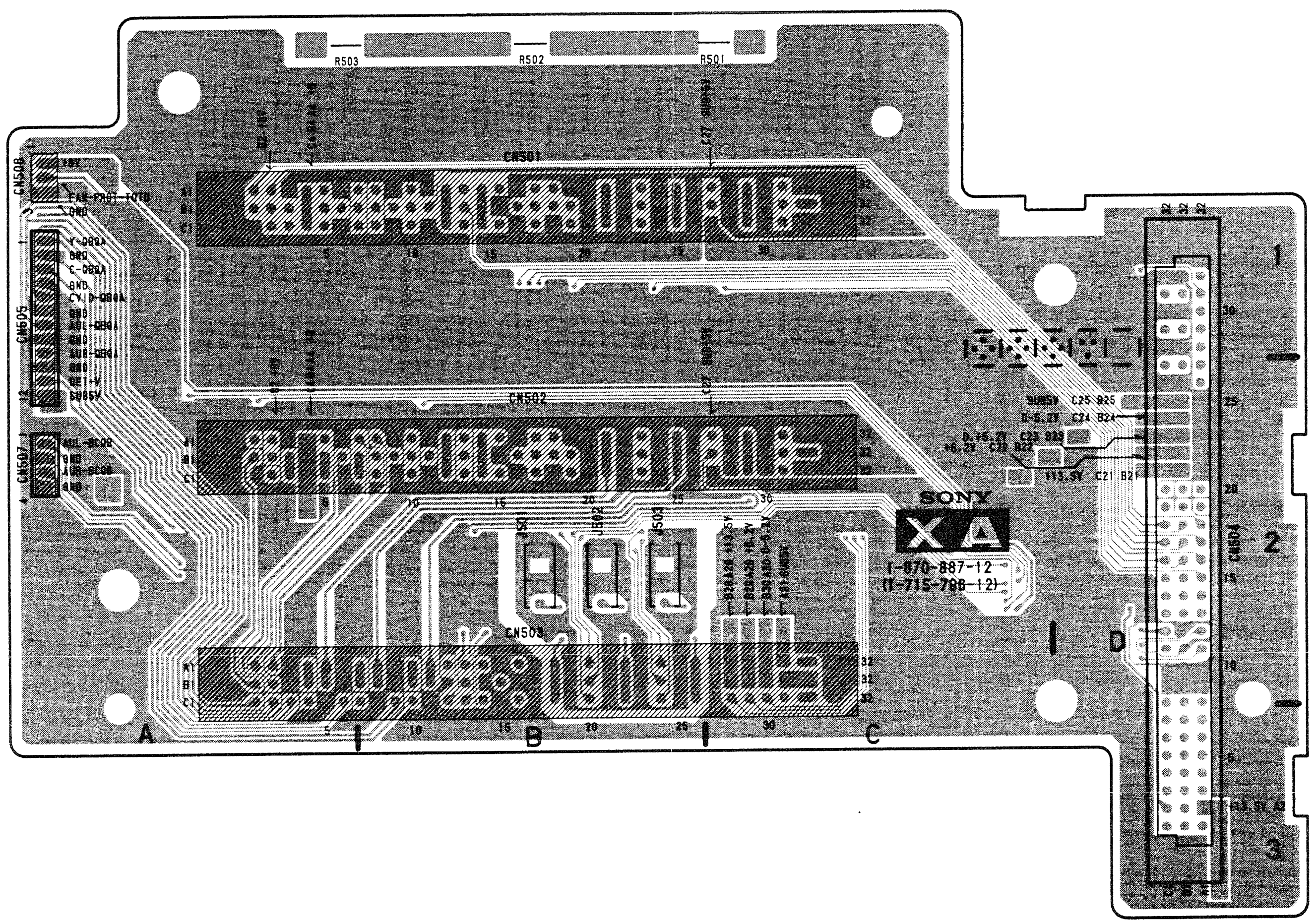
GC – A SIDE –

SUFFIX ; -11


A
B
2
C7204
C7202
R7204
R7205
R7218
R7216
R7210
R7201
R7208
R7207
CN7201
GC
SONY

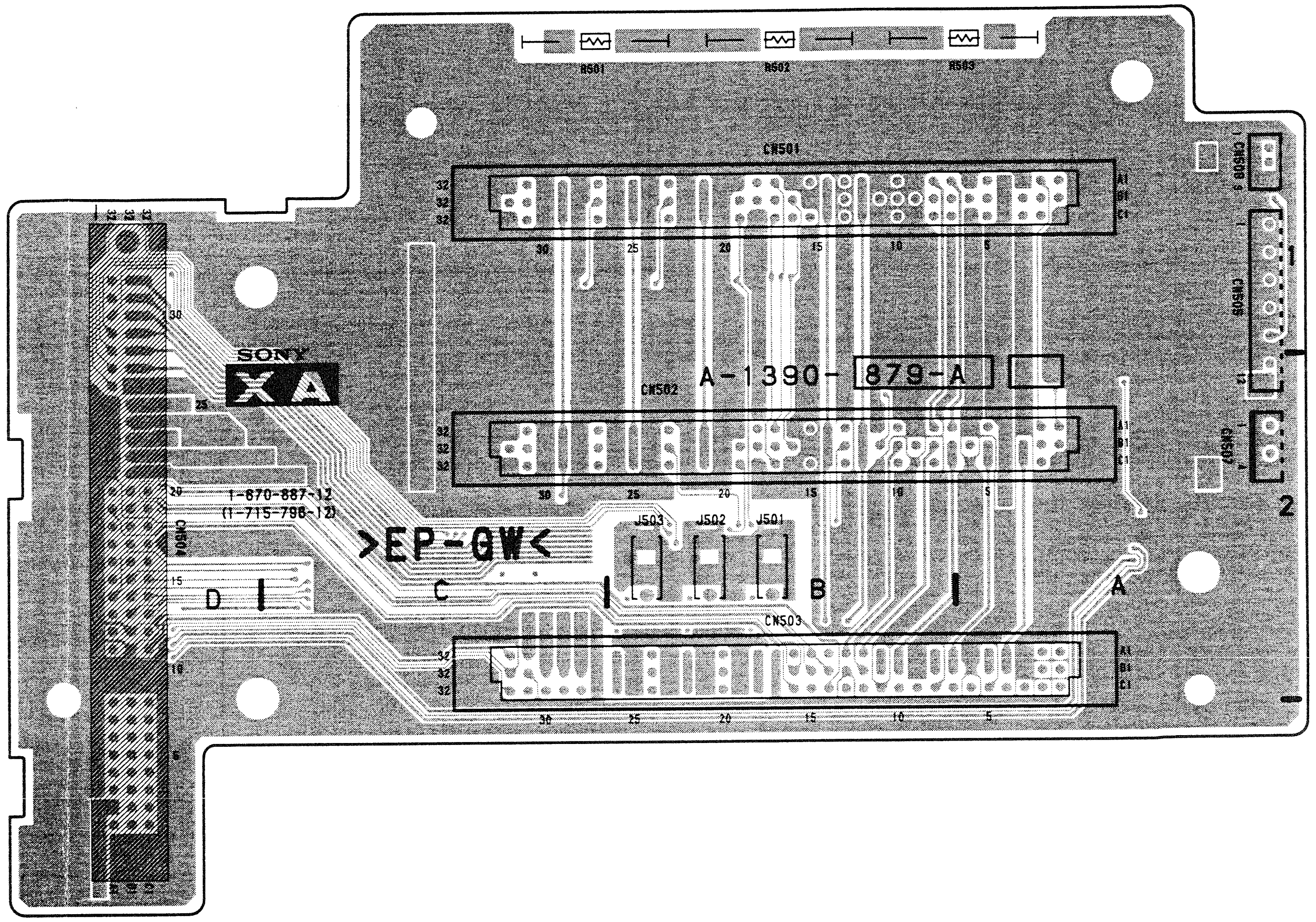
GC – B SIDE –

SUFFIX ; -11


CN501
CN502
CN503
CN504
CN505
CN507
CN508
R501
R502
R503
J501
J502
J503
SONY
XA
1-670-887-12
(1-715-796-12)
A
B
C
D
1
2
3

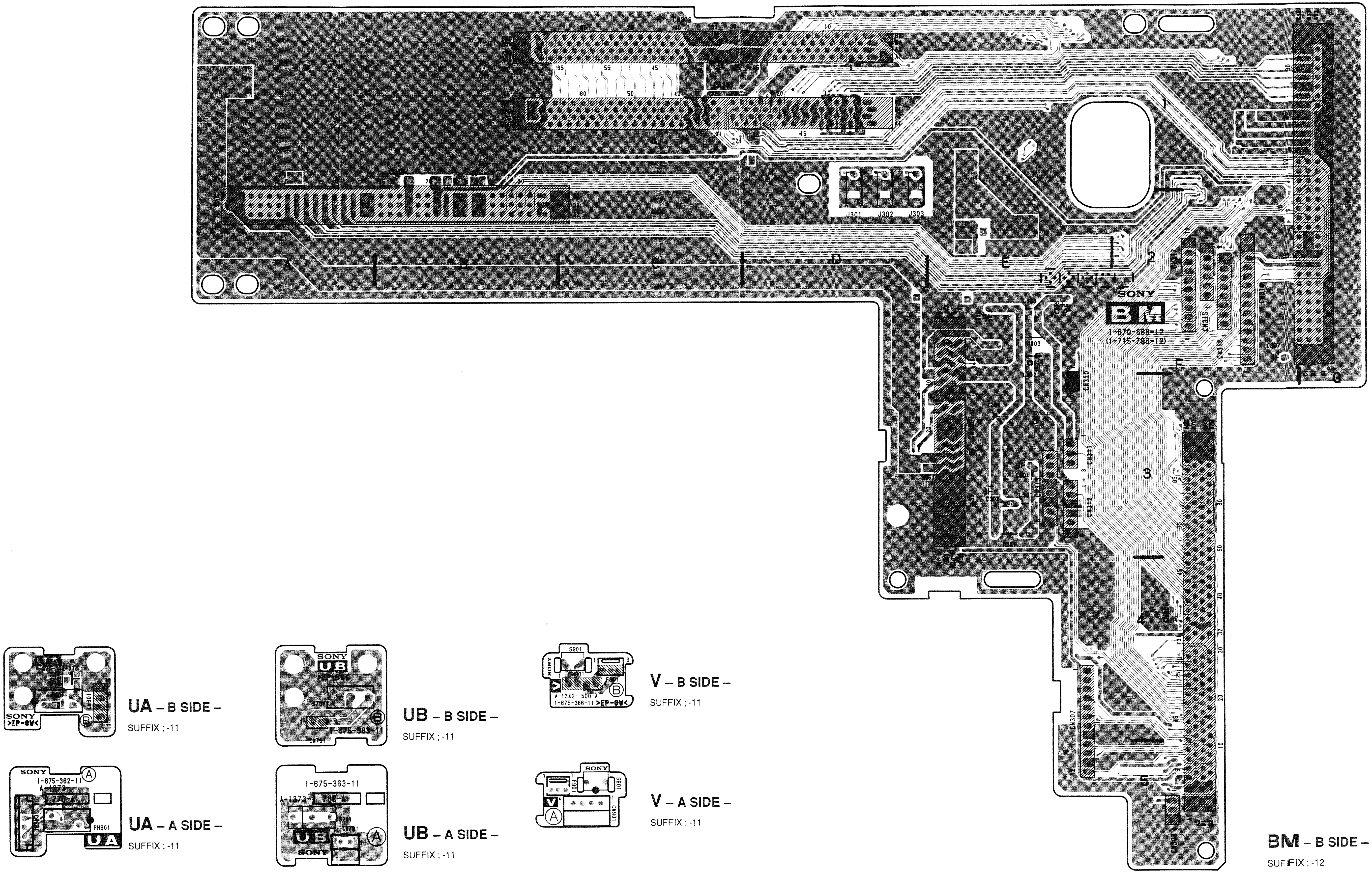
XA – B SIDE –

SUFFIX ; -12


CN501
CN502
CN503
CN504
CN506
CN507
R501
R502
R503
J501
J502
J503
SONY
XA
1-670-887-12
(1-715-796-12)
A-1390-879-A
>EP-QW<
A
B
C
D
1
2

XA – A SIDE –

SUFFIX ; -12


CN302
J301
J302
J303
A
B
C
D
E
F
G
1
2
3
4
5
SONY
BM
1-670-888-12
(1-715-786-12)
CN310
CN311
CN312
CN315
CN316
CN307
CN304
CN306

BM – B SIDE –

SUFFIX ; -12

UA
SONY
>EP-8W<
B
CN601

UA – B SIDE –

SUFFIX ; -11

SONY
UB
>EP-8W<
B
1-675-363-11
CN701

UB – B SIDE –

SUFFIX ; -11

S901
SONY
V
CN901
F901
B
A-1342-500-A
1-675-366-11 >EP-8W<

V – B SIDE –

SUFFIX ; -11

SONY
A
1-675-362-11
A-1373-
770-A
PH601
UA

UA – A SIDE –

SUFFIX ; -11

1-675-363-11
A-1373-
788-A
UB
SONY
CN701
A

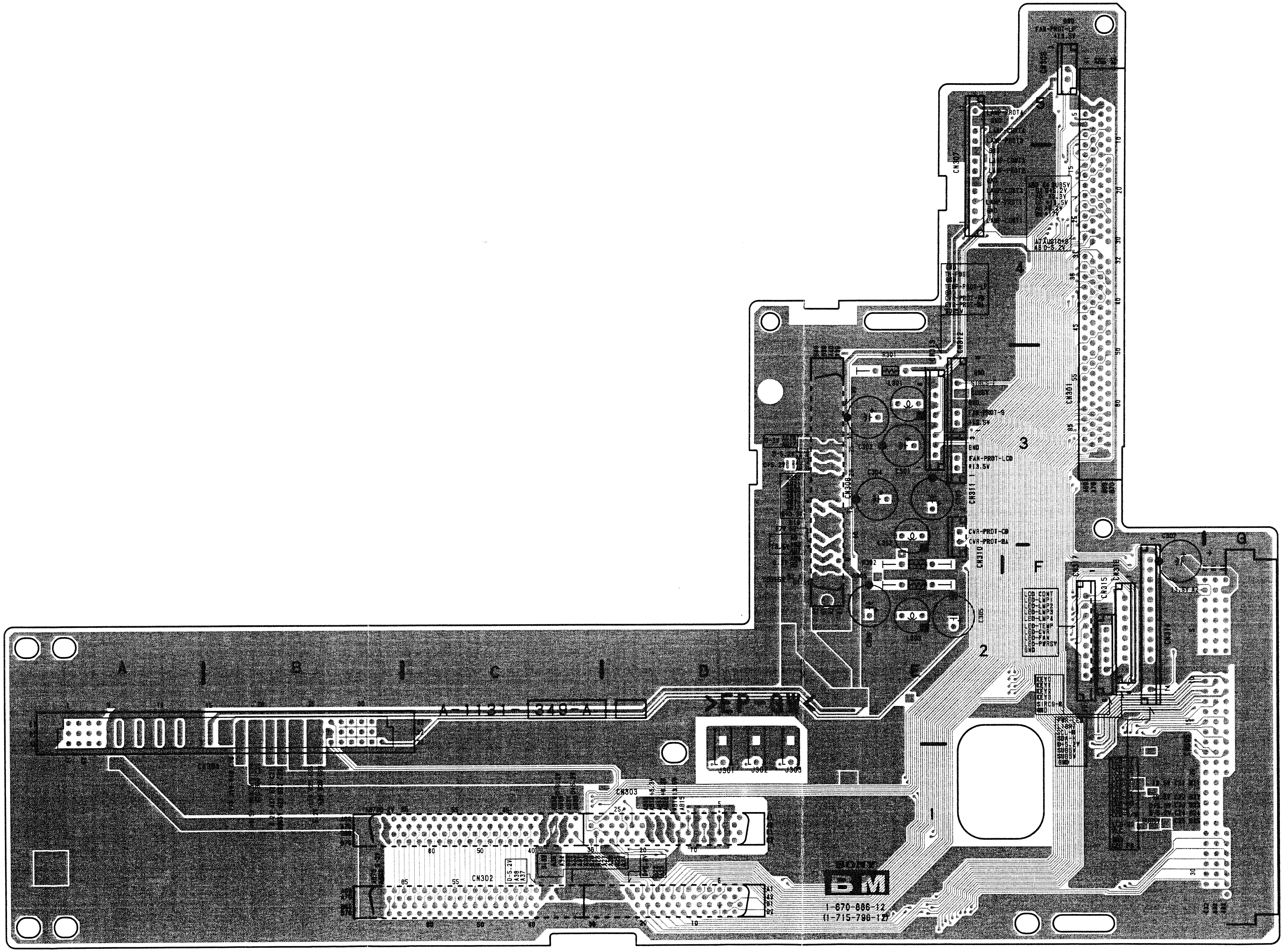
UB – A SIDE –

SUFFIX ; -11

SONY
F901
S901
V
A
CN901

V – A SIDE –

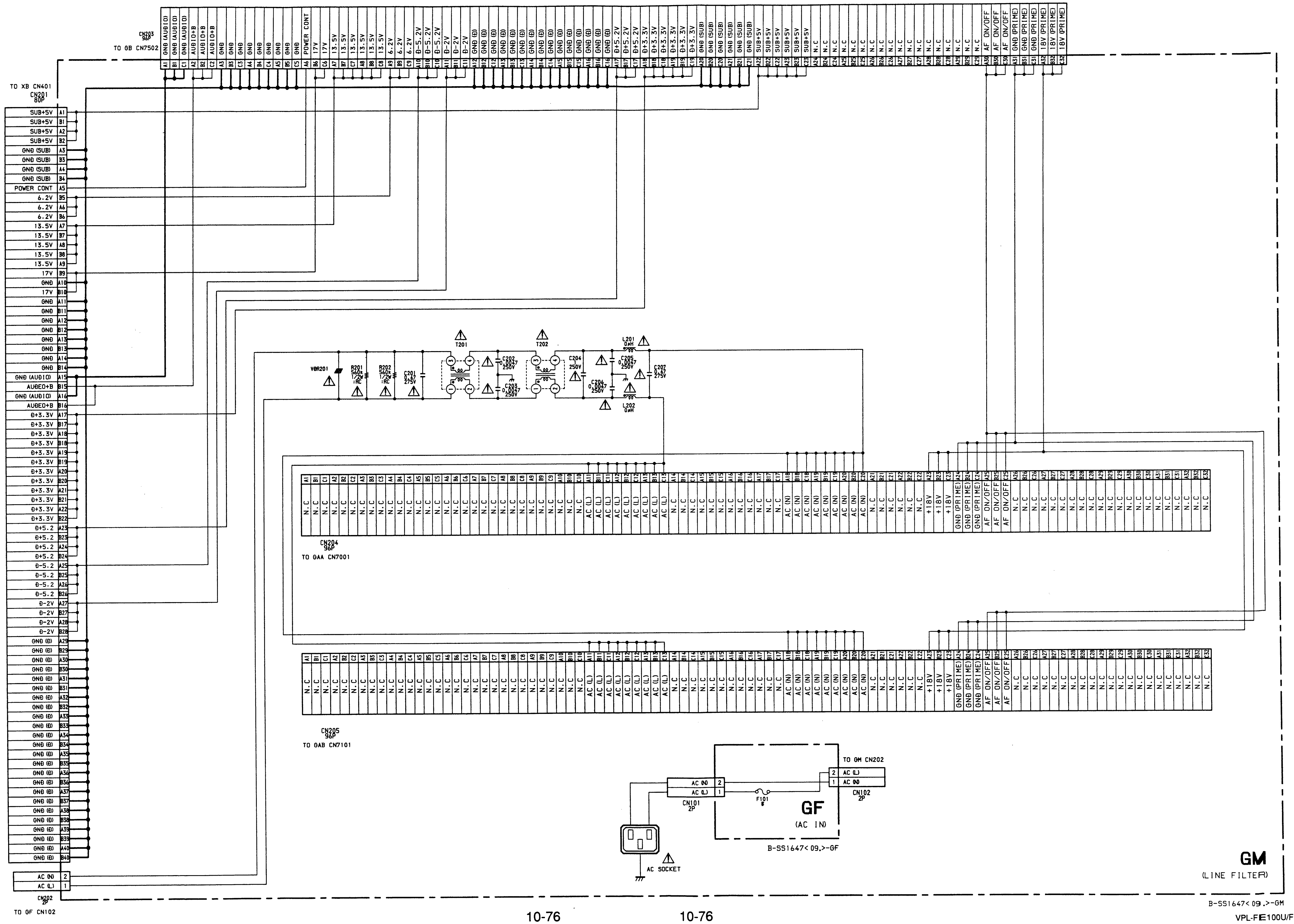
SUFFIX ; -11


A
B
C
D
E
F
G
1
2
3
4
5
CN301
CN302
CN303
CN307
CN310
CN311
CN315
A-1131-349-A
J301
J302
J303
SONY
BM
1-670-886-12
(1-715-796-12)

BM – A SIDE –

SUFFIX ; -12

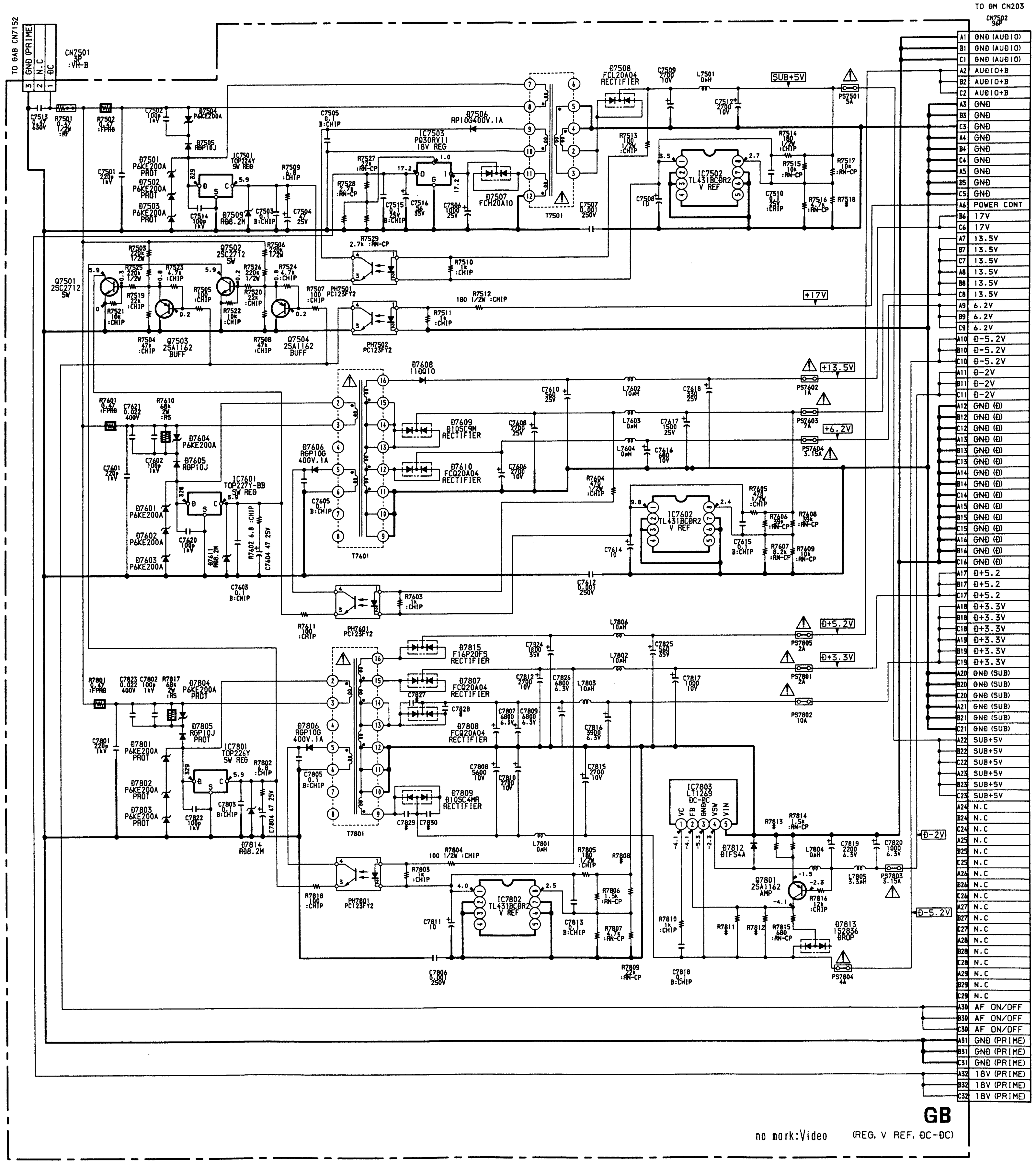
- Refer to page 10-75, 10-77 for Printed Wiring Board


CN203
96P
TO GB CN7502
TO XB CN401
CN201
80P
SUB+5V
GND (SUB)
POWER CONT
6.2V
13.5V
17V
GND
GND (AUDIO)
AUDIO+B
D+3.3V
D+5.2
D-5.2
D-2V
GND (D)
AC (N)
AC (L)
CN202
2P
TO GF CN102
VBR201
R201
560k
1/2W
:RC
R202
560k
1/2W
:RC
C201
0.47
275V
T201
C202
0.0047
250V
C203
0.0047
250V
T202
C204
1
250V
C205
0.0047
250V
C206
0.0047
250V
L201
0μH
L202
0μH
C207
0.47
275V
N.C
+18V
GND (PRIME)
AF ON/OFF
18V (PRIME)
CN204
96P
TO GAA CN7001
CN205
96P
TO GAB CN7101
TO GM CN202
CN101
2P
CN102
2P
F101
GF
(AC IN)
B-SS1647< 09.>-GF
AC SOCKET
GM
(LINE FILTER)
B-SS1647< 09.>-GM

1
2
3
4
5

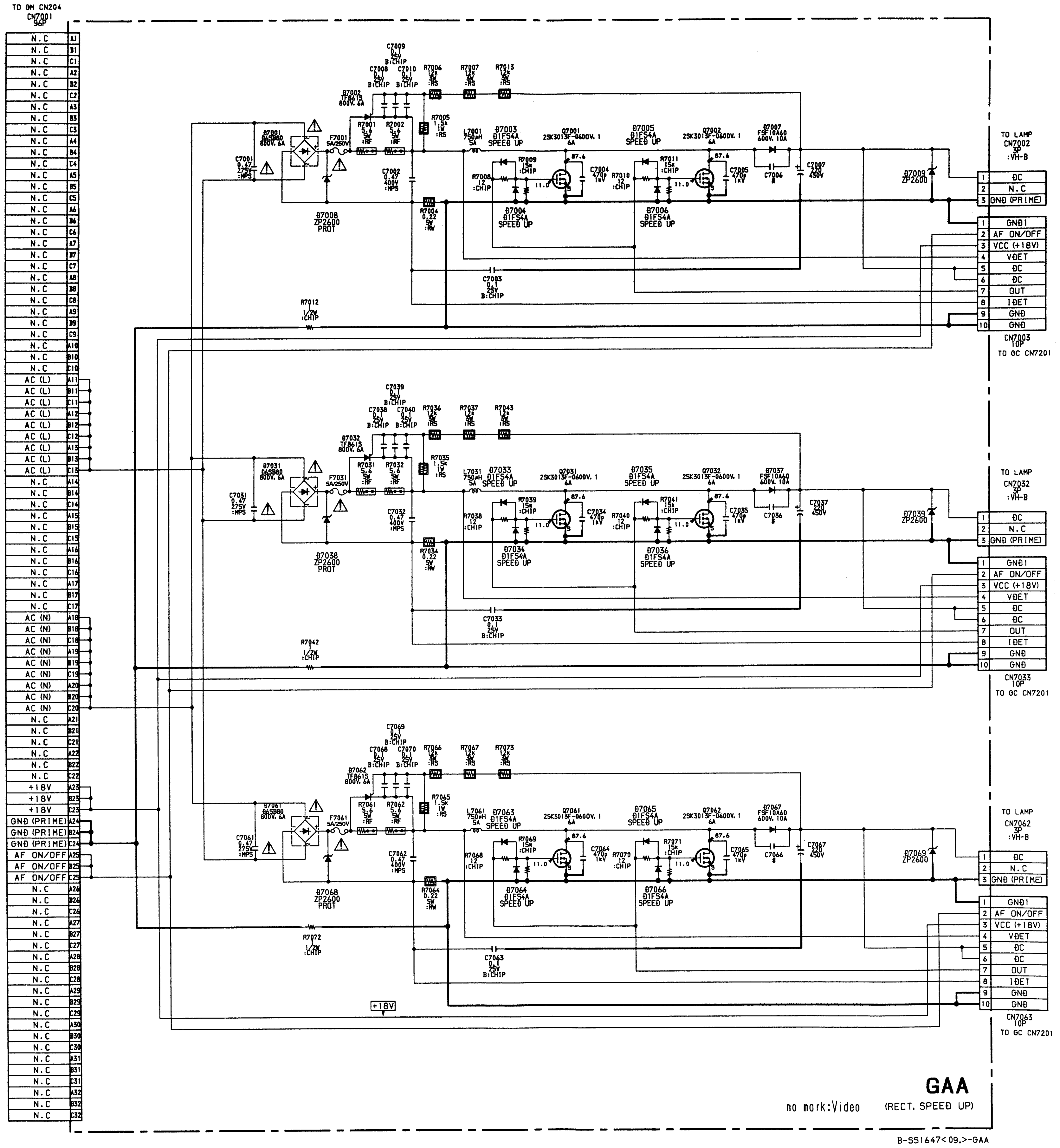
A B C D E F G H

- Refer to page 10-78 for Printed Wiring Board


TO GAB CN7152
3 GND (PRIME)
2 N.C
1 ÐC
CN7501 3P :VH-B
TO GM CN203
CN7502 96P
A1 GND (AUDIO)
B1 GND (AUDIO)
C1 GND (AUDIO)
A2 AUDIO+B
B2 AUDIO+B
C2 AUDIO+B
A3 GND
B3 GND
C3 GND
A4 GND
B4 GND
C4 GND
A5 GND
B5 GND
C5 GND
A6 POWER CONT
B6 17V
C6 17V
A7 13.5V
B7 13.5V
C7 13.5V
A8 13.5V
B8 13.5V
C8 13.5V
A9 6.2V
B9 6.2V
C9 6.2V
A10 Ð-5.2V
B10 Ð-5.2V
C10 Ð-5.2V
A11 Ð-2V
B11 Ð-2V
C11 Ð-2V
A12 GND (Ð)
B12 GND (Ð)
C12 GND (Ð)
A13 GND (Ð)
B13 GND (Ð)
C13 GND (Ð)
A14 GND (Ð)
B14 GND (Ð)
C14 GND (Ð)
A15 GND (Ð)
B15 GND (Ð)
C15 GND (Ð)
A16 GND (Ð)
B16 GND (Ð)
C16 GND (Ð)
A17 Ð+5.2
B17 Ð+5.2
C17 Ð+5.2
A18 Ð+3.3V
B18 Ð+3.3V
C18 Ð+3.3V
A19 Ð+3.3V
B19 Ð+3.3V
C19 Ð+3.3V
A20 GND (SUB)
B20 GND (SUB)
C20 GND (SUB)
A21 GND (SUB)
B21 GND (SUB)
C21 GND (SUB)
A22 SUB+5V
B22 SUB+5V
C22 SUB+5V
A23 SUB+5V
B23 SUB+5V
C23 SUB+5V
A24 N.C
B24 N.C
C24 N.C
A25 N.C
B25 N.C
C25 N.C
A26 N.C
B26 N.C
C26 N.C
A27 N.C
B27 N.C
C27 N.C
A28 N.C
B28 N.C
C28 N.C
A29 N.C
B29 N.C
C29 N.C
A30 AF ON/OFF
B30 AF ON/OFF
C30 AF ON/OFF
A31 GND (PRIME)
B31 GND (PRIME)
C31 GND (PRIME)
A32 18V (PRIME)
B32 18V (PRIME)
C32 18V (PRIME)
IC7501 TOP224Y SW REG
IC7503 PQ30RV11 18V REG
IC7502 TL431BCBR2 V REF
IC7601 TOP227Y-BB SW REG
IC7602 TL431BCBR2 V REF
IC7801 TOP226Y SW REG
IC7802 TL431BCBR2 V REF
IC7803 LT1269 DC-DC
T7501
T7601
T7801
PH7501 PC123FY2
PH7502 PC123FY2
PH7601 PC123FY2
PH7801 PC123FY2
Q7501 2SC2712 SW
Q7502 2SC2712 SW
Q7503 2SA1162 BUFF
Q7504 2SA1162 BUFF
Q7801 2SA1162 AMP
D7508 FCL20A04 RECTIFIER
D7507 FCH20A10
D7609 D10SC9M RECTIFIER
D7610 FCQ20A04 RECTIFIER
D7815 F16P20FS RECTIFIER
D7807 FCQ20A04 RECTIFIER
D7808 FCQ20A04 RECTIFIER
D7809 D10SC4MR RECTIFIER
D7812 D1FS4A
D7813 1S2836 DROP
SUB+5V
+17V
+13.5V
+6.2V
Ð+5.2V
Ð+3.3V
Ð-2V
Ð-5.2V
PS7501 5A
PS7602 1A
PS7603 7A
PS7604 3.15A
PS7805 2A
PS7801 2A
PS7802 10A
PS7803 3.15A
PS7804 4A
GB
no mark:Video
(REG. V REF. ÐC-ÐC)

B-SS1647<09.>-GB

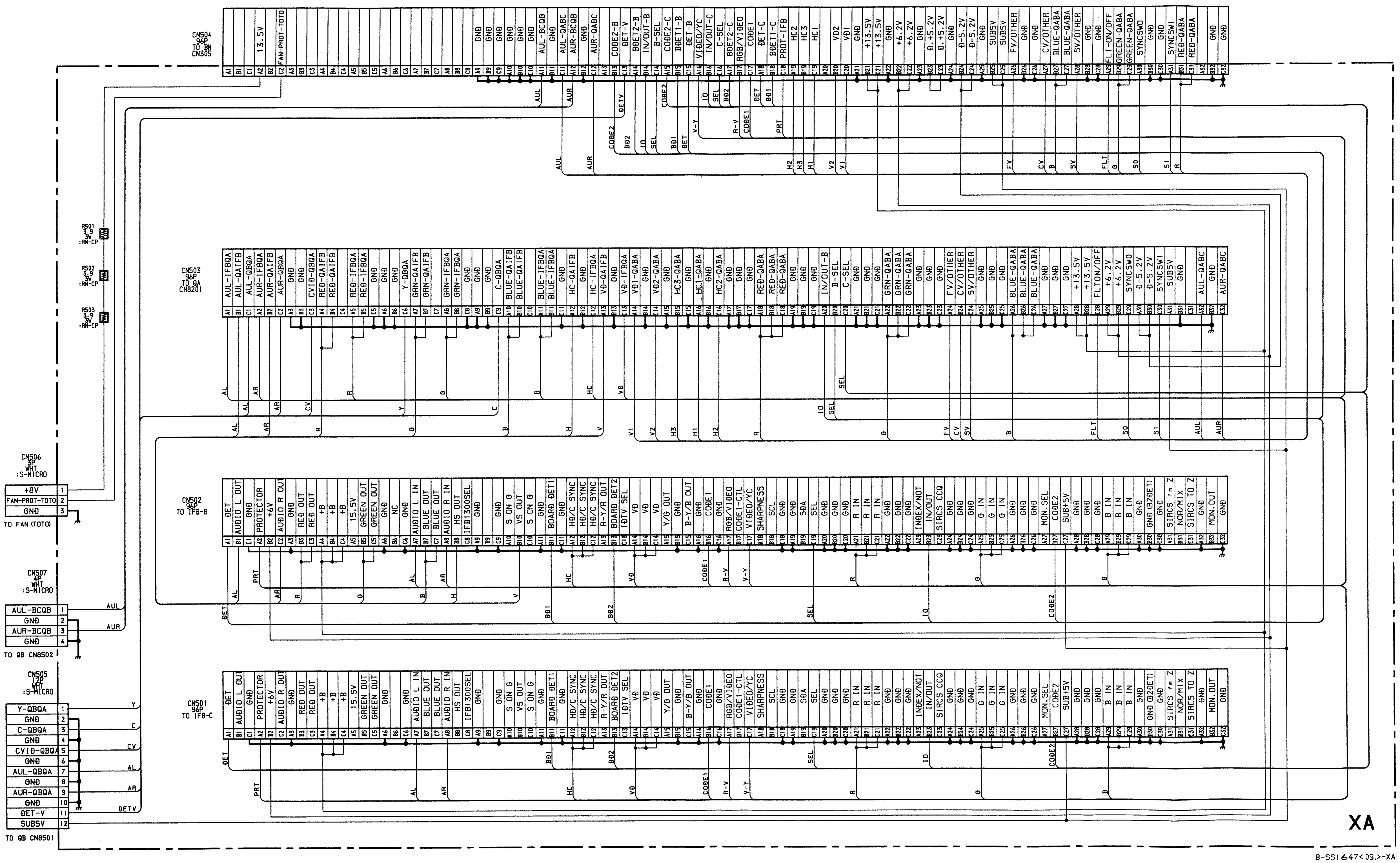
- Refer to page 10-80 for Printed Wiring Board


TO GM CN204
CN7001
96P
N.C
AC (L)
AC (N)
+18V
GND (PRIME)
AF ON/OFF
C7001
0.47
275V
:MPS
D7001
RS880
800V, 6A
F7001
5A/250V
D7002
TF8615
800V, 6A
C7008
0.1
25V
B:CHIP
C7009
0.1
25V
B:CHIP
C7010
0.1
25V
B:CHIP
R7006
12k
5W
:RS
R7007
12k
5W
:RS
R7013
12k
5W
:RS
R7001
5.6
5W
:RF
R7002
5.6
5W
:RF
R7005
1.5k
1W
:RS
C7002
0.47
400V
:MPS
D7008
ZP2600
PROT
R7004
0.22
5W
:RW
L7001
750μH
5A
D7003
D1FS4A
SPEED UP
Q7001
2SK3013F-0600V, 1
6A
R7009
15k
:CHIP
R7008
12
:CHIP
C7004
470p
1kV
D7004
D1FS4A
SPEED UP
D7005
D1FS4A
SPEED UP
Q7002
2SK3013F-0600V, 1
6A
R7011
15k
:CHIP
R7010
12
:CHIP
C7005
470p
1kV
D7006
D1FS4A
SPEED UP
D7007
FSF10A60
600V, 10A
C7006
C7007
220
450V
87.6
11.0
C7003
0.1
25V
B:CHIP
R7012
1/2W
:CHIP
D7009
ZP2600
TO LAMP
CN7002
3P
:VH-B
1 DC
2 N.C
3 GND (PRIME)
1 GND1
2 AF ON/OFF
3 VCC (+18V)
4 VDET
5 DC
6 DC
7 OUT
8 IDET
9 GND
10 GND
CN7003
10P
TO GC CN7201
TO LAMP
CN7032
3P
:VH-B
CN7033
10P
TO GC CN7201
R7042
1/2W
:CHIP
D7038
ZP2600
PROT
TO LAMP
CN7062
3P
:VH-B
CN7063
10P
TO GC CN7201
R7072
1/2W
:CHIP
D7068
ZP2600
PROT
+18V
GAA
no mark:Video
(RECT. SPEED UP)
B-SS1647<09.>-GAA

A | B | C | D | E | F | G | H

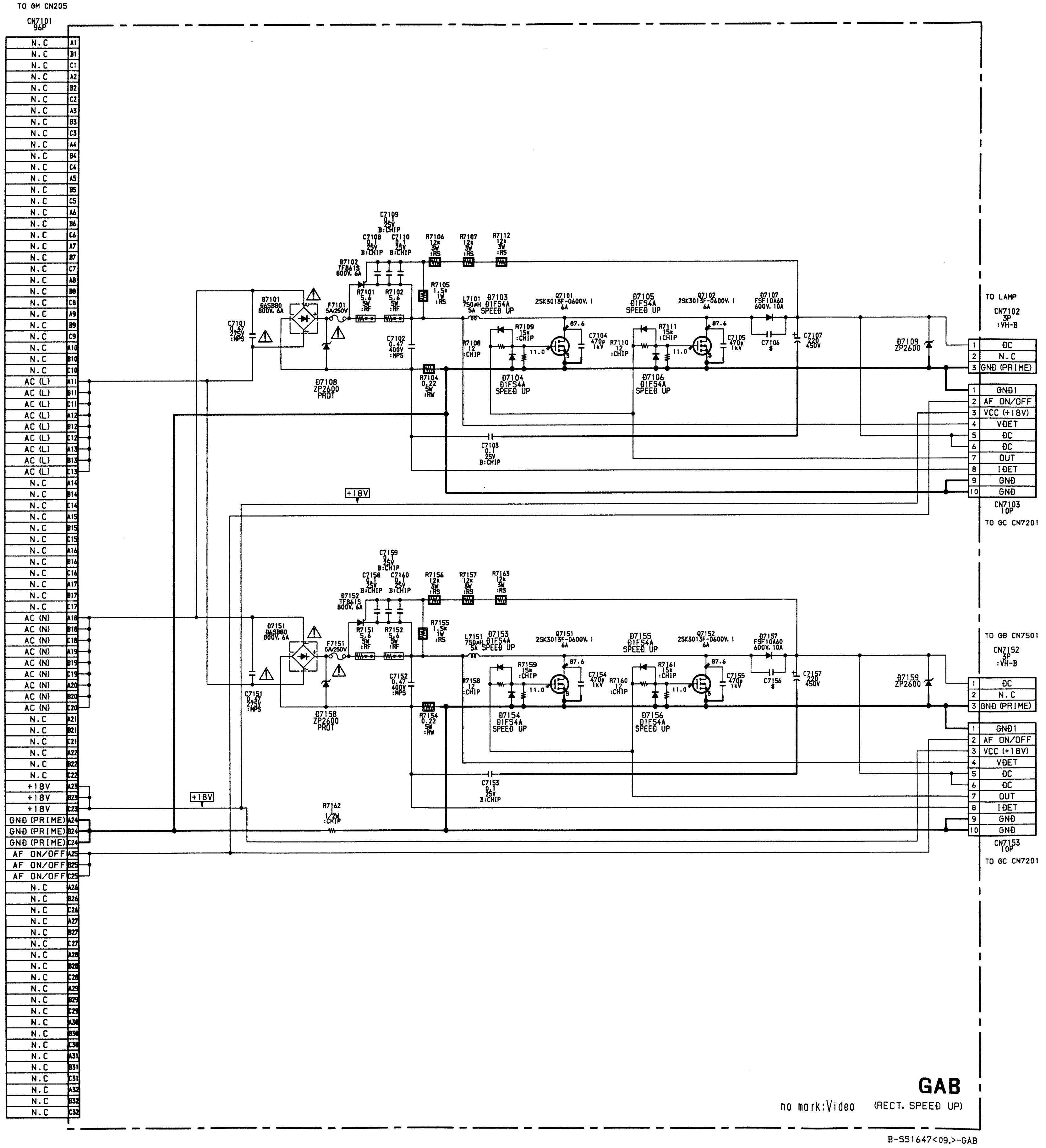
1 2 3 4 5

- Refer to page 10-86 for Printed Wiring Board


CN504
96P
TO BM
CN305
CN503
96P
TO QA
CN8201
CN502
96P
TO IFB-B
CN501
96P
TO IFB-C
R501
3.9
3W
:RN-CP
R502
3.9
3W
:RN-CP
R503
3.9
3W
:RN-CP
CN506
3P
WHT
:S-MICRO
+8V
FAN-PROT-TOTO
GND
TO FAN (TOTO)
CN507
4P
WHT
:S-MICRO
AUL-BCQB
GND
AUR-BCQB
GND
TO QB CN8502
CN505
12P
WHT
:S-MICRO
Y-QBQA
GND
C-QBQA
GND
CVID-QBQA
GND
AUL-QBQA
GND
AUR-QBQA
GND
DET-V
SUB5V
TO QB CN8501
XA

B-SS1647<09>-XA

- Refer to page 10-82 for Printed Wiring Board


TO GM CN205
CN7101 96P
N.C A1 … C10
AC (L) A11 B11 C11 A12 B12 C12 A13 B13 C13
N.C A14 … C17
AC (N) A18 B18 C18 A19 B19 C19 A20 B20 C20
N.C A21 … C22
+18V A23 B23 C23
GND (PRIME) A24 B24 C24
AF ON/OFF A25 B25 C25
N.C A26 … C32
C7109 0.1 25V B:CHIP
C7108 0.1 25V B:CHIP
C7110 0.1 25V B:CHIP
R7106 12k 3W :RS
R7107 12k 3W :RS
R7112 12k 3W :RS
D7102 TF861S 800V, 6A
D7101 D6SB80 800V, 6A
C7101 0.47 275V :MPS
F7101 5A/250V
R7101 5.6 5W :RF
R7102 5.6 5W :RF
R7105 1.5k 1W :RS
C7102 0.47 400V :MPS
D7108 ZP2600 PROT
R7104 0.22 5W :RW
L7101 750μH 5A
D7103 D1FS4A SPEED UP
R7108 12 :CHIP
R7109 15k :CHIP
D7104 D1FS4A SPEED UP
Q7101 2SK3013F-0600V, 1 6A
87.6
11.0
C7104 470p 1kV
D7105 D1FS4A SPEED UP
R7110 12 :CHIP
R7111 15k :CHIP
D7106 D1FS4A SPEED UP
Q7102 2SK3013F-0600V, 1 6A
C7105 470p 1kV
D7107 FSF10A60 600V, 10A
C7106 ＊
C7107 220 450V
C7103 0.1 25V B:CHIP
D7109 ZP2600
TO LAMP
CN7102 3P :VH-B
1 DC
2 N.C
3 GND (PRIME)
1 GND1
2 AF ON/OFF
3 VCC (+18V)
4 VDET
5 DC
6 DC
7 OUT
8 IDET
9 GND
10 GND
CN7103 10P
TO GC CN7201
+18V
C7159 0.1 25V B:CHIP
C7158 0.1 25V B:CHIP
C7160 0.1 25V B:CHIP
R7156 12k 3W :RS
R7157 12k 3W :RS
R7163 12k 3W :RS
D7152 TF861S 800V, 6A
D7151 D6SB80 800V, 6A
C7151 0.47 275V :MPS
F7151 5A/250V
R7151 5.6 5W :RF
R7152 5.6 5W :RF
R7155 1.5k 1W :RS
C7152 0.47 400V :MPS
D7158 ZP2600 PROT
R7154 0.22 5W :RW
L7151 750μH 5A
D7153 D1FS4A SPEED UP
R7158 12 :CHIP
R7159 15k :CHIP
D7154 D1FS4A SPEED UP
Q7151 2SK3013F-0600V, 1 6A
C7154 470p 1kV
D7155 D1FS4A SPEED UP
R7160 12 :CHIP
R7161 15k :CHIP
D7156 D1FS4A SPEED UP
Q7152 2SK3013F-0600V, 1 6A
C7155 470p 1kV
D7157 FSF10A60 600V, 10A
C7156 ＊
C7157 220 450V
C7153 0.1 25V B:CHIP
D7159 ZP2600
TO GB CN7501
CN7152 3P :VH-B
1 DC
2 N.C
3 GND (PRIME)
1 GND1
2 AF ON/OFF
3 VCC (+18V)
4 VDET
5 DC
6 DC
7 OUT
8 IDET
9 GND
10 GND
CN7153 10P
TO GC CN7201
+18V
R7162 1/2W :CHIP
GAB
no mark:Video
(RECT, SPEED UP)
B-SS1647<09.>-GAB

1

2

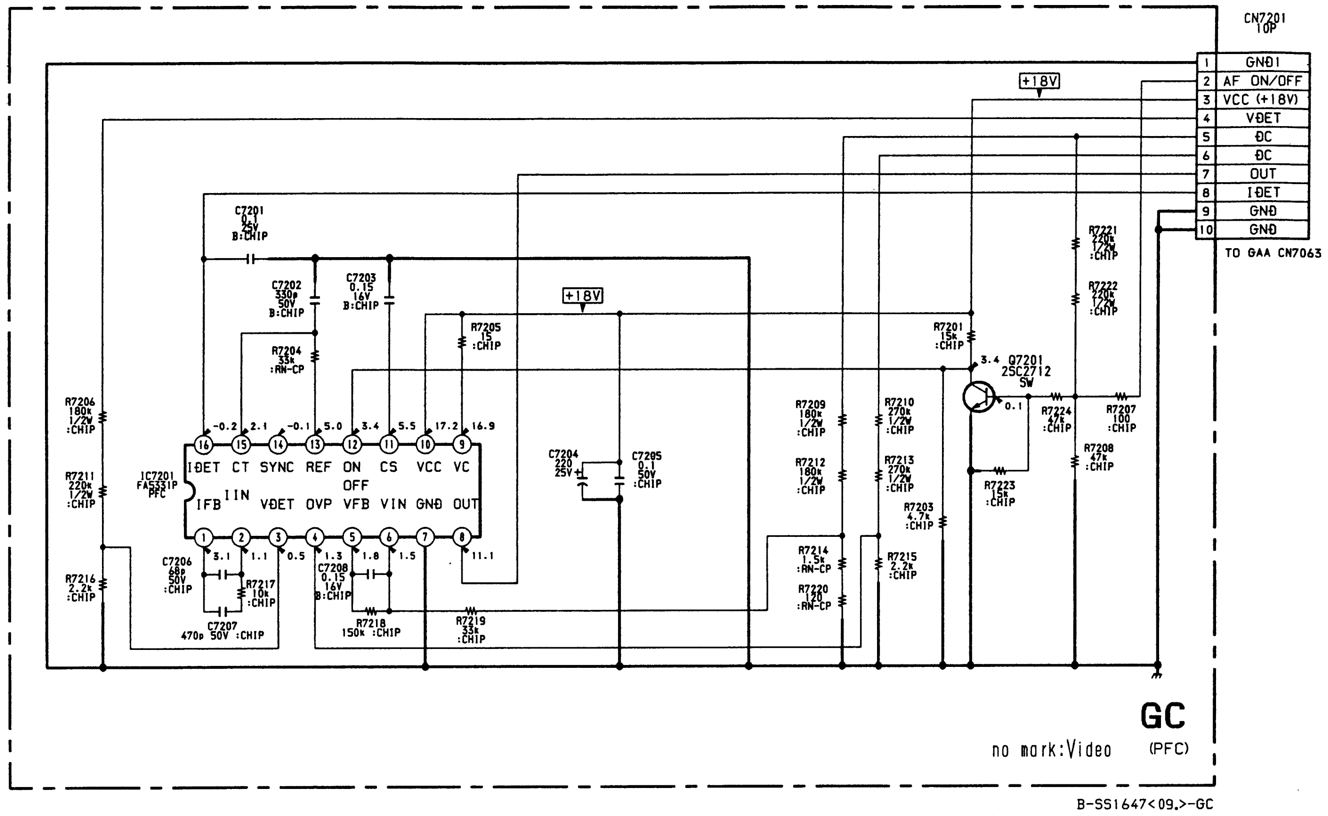
3

4

5

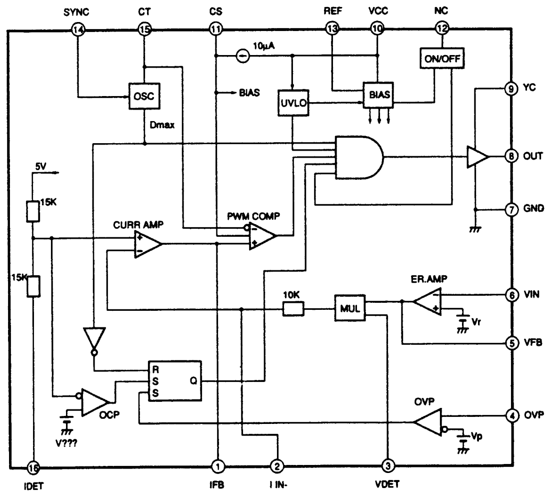
A | B | C | D | E | F | G | H

- Refer to page 10-84 for Printed Wiring Board


CN7201
10P
1 GND1
2 AF ON/OFF
3 VCC (+18V)
4 VDET
5 DC
6 DC
7 OUT
8 IDET
9 GND
10 GND
TO GAA CN7063
+18V
C7201 0.1 25V B:CHIP
C7202 330p 50V B:CHIP
C7203 0.15 16V B:CHIP
R7204 33k :RN-CP
R7205 15 :CHIP
R7206 180k 1/2W :CHIP
R7211 220k 1/2W :CHIP
R7216 2.2k :CHIP
IC7201 FA5331P PFC
IDET CT SYNC REF ON OFF CS VCC VC
IFB IIN VDET OVP VFB VIN GND OUT
-0.2 2.1 -0.1 5.0 3.4 5.5 17.2 16.9
3.1 1.1 0.5 1.3 1.8 1.5 11.1
C7206 68p 50V :CHIP
R7217 10k :CHIP
C7207 470p 50V :CHIP
C7208 0.15 16V B:CHIP
R7218 150k :CHIP
R7219 33k :CHIP
C7204 220 25V
C7205 0.1 50V :CHIP
R7209 180k 1/2W :CHIP
R7212 180k 1/2W :CHIP
R7210 270k 1/2W :CHIP
R7213 270k 1/2W :CHIP
R7214 1.5k :RN-CP
R7220 120 :RN-CP
R7215 2.2k :CHIP
R7203 4.7k :CHIP
R7201 15k :CHIP
3.4 Q7201 2SC2712 SW
0.1
R7224 47k :CHIP
R7207 100 :CHIP
R7223 15k :CHIP
R7221 220k 1/2W :CHIP
R7222 220k 1/2W :CHIP
R7208 47k :CHIP
GC
no mark:Video
(PFC)
B-SS1647<09,>-GC

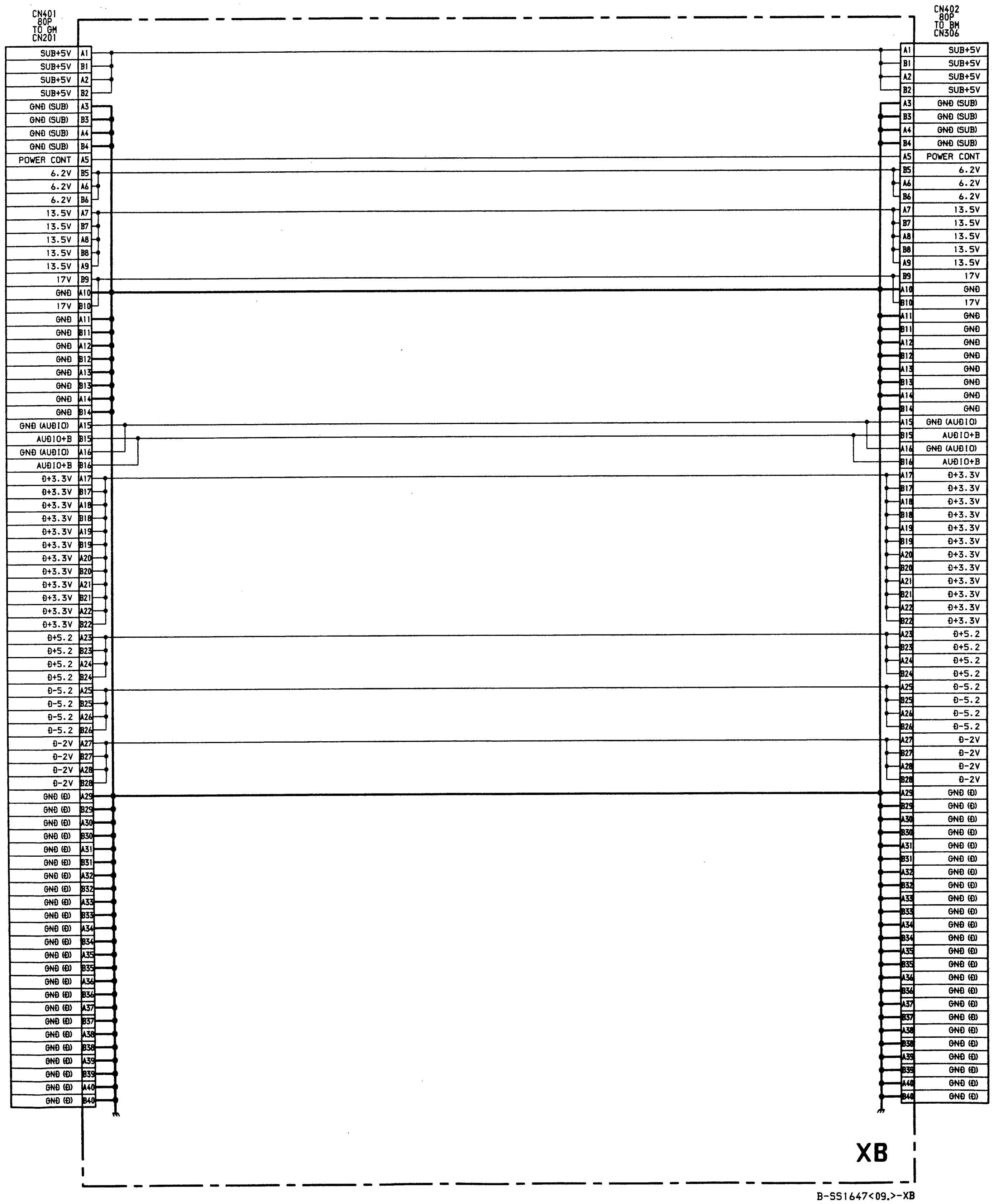
GC Board IC Block Diagram

FA5331P (IC7201)

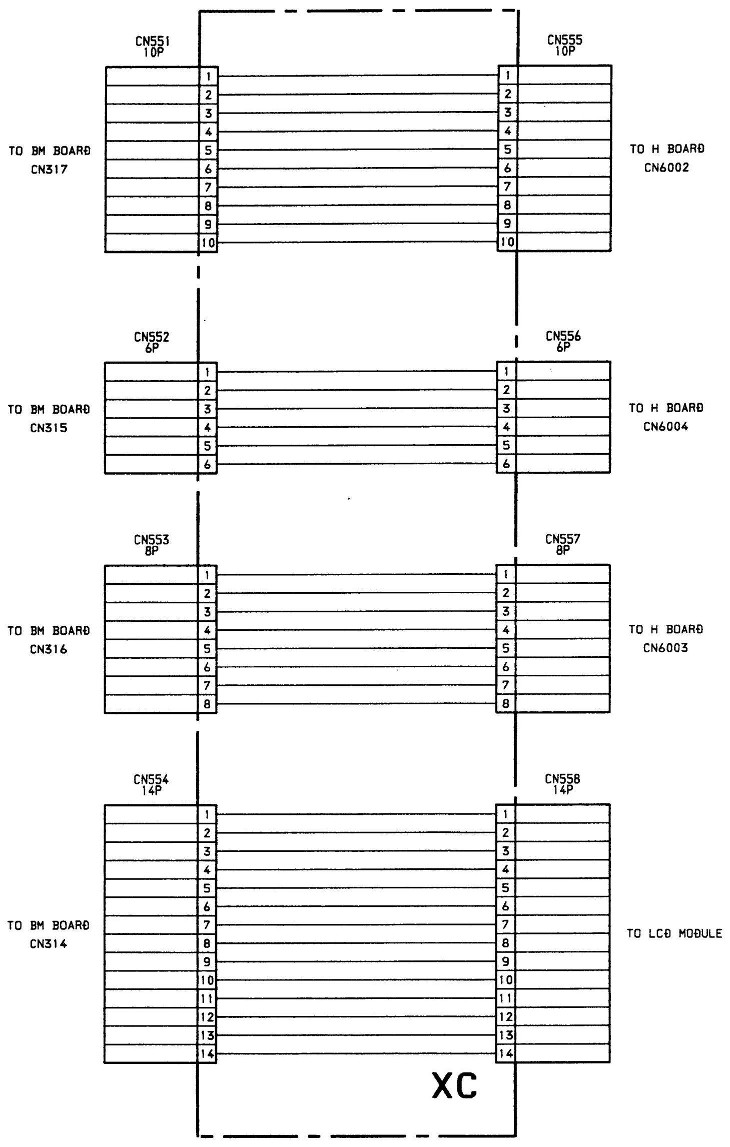

SYNC
CT
CS
REF
VCC
NC
14
15
11
13
10
12
10µA
OSC
BIAS
UVLO
BIAS
ON/OFF
Dmax
9 YC
8 OUT
7 GND
5V
15K
15K
CURR AMP
PWM COMP
10K
MUL
ER.AMP
Vr
6 VIN
5 VFB
R
S
S
Q
OCP
V???
OVP
Vp
4 OVP
16
1
2
3
IDET
IFB
I IN-
VDET

XB, XC XB, XC

- Refer to page 10-86 for Printed Wiring Board

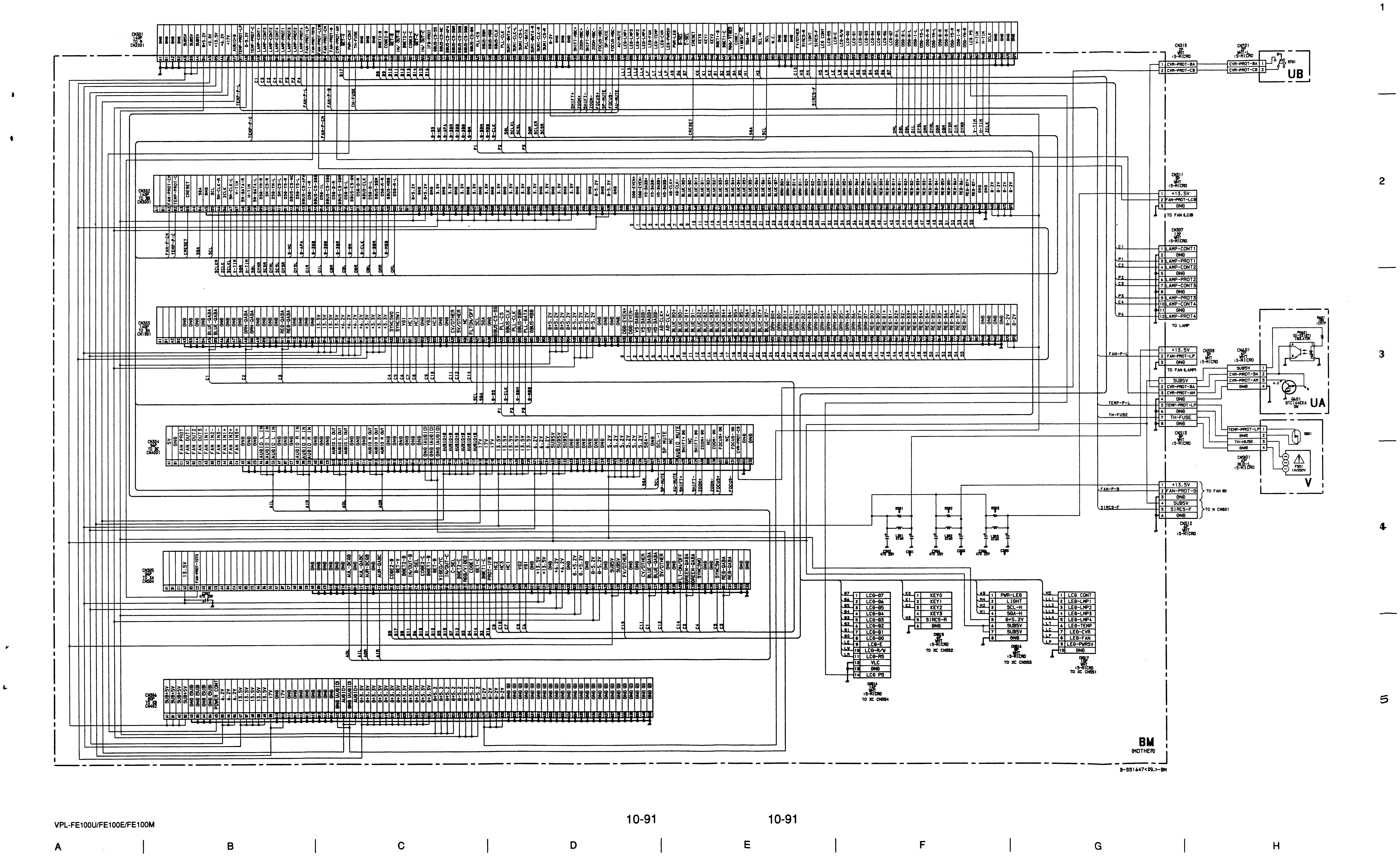

CN401
80P
TO GM
CN201
SUB+5V A1
SUB+5V B1
SUB+5V A2
SUB+5V B2
GND (SUB) A3
GND (SUB) B3
GND (SUB) A4
GND (SUB) B4
POWER CONT A5
6.2V B5
6.2V A6
6.2V B6
13.5V A7
13.5V B7
13.5V A8
13.5V B8
13.5V A9
17V B9
GND A10
17V B10
GND A11
GND B11
GND A12
GND B12
GND A13
GND B13
GND A14
GND B14
GND (AUDIO) A15
AUDIO+B B15
GND (AUDIO) A16
AUDIO+B B16
D+3.3V A17
D+3.3V B17
D+3.3V A18
D+3.3V B18
D+3.3V A19
D+3.3V B19
D+3.3V A20
D+3.3V B20
D+3.3V A21
D+3.3V B21
D+3.3V A22
D+3.3V B22
D+5.2 A23
D+5.2 B23
D+5.2 A24
D+5.2 B24
D-5.2 A25
D-5.2 B25
D-5.2 A26
D-5.2 B26
D-2V A27
D-2V B27
D-2V A28
D-2V B28
GND (D) A29
GND (D) B29
GND (D) A30
GND (D) B30
GND (D) A31
GND (D) B31
GND (D) A32
GND (D) B32
GND (D) A33
GND (D) B33
GND (D) A34
GND (D) B34
GND (D) A35
GND (D) B35
GND (D) A36
GND (D) B36
GND (D) A37
GND (D) B37
GND (D) A38
GND (D) B38
GND (D) A39
GND (D) B39
GND (D) A40
GND (D) B40
CN402
80P
TO BM
CN306
A1 SUB+5V
B1 SUB+5V
A2 SUB+5V
B2 SUB+5V
A3 GND (SUB)
B3 GND (SUB)
A4 GND (SUB)
B4 GND (SUB)
A5 POWER CONT
B5 6.2V
A6 6.2V
B6 6.2V
A7 13.5V
B7 13.5V
A8 13.5V
B8 13.5V
A9 13.5V
B9 17V
A10 GND
B10 17V
A11 GND
B11 GND
A12 GND
B12 GND
A13 GND
B13 GND
A14 GND
B14 GND
A15 GND (AUDIO)
B15 AUDIO+B
A16 GND (AUDIO)
B16 AUDIO+B
A17 D+3.3V
B17 D+3.3V
A18 D+3.3V
B18 D+3.3V
A19 D+3.3V
B19 D+3.3V
A20 D+3.3V
B20 D+3.3V
A21 D+3.3V
B21 D+3.3V
A22 D+3.3V
B22 D+3.3V
A23 D+5.2
B23 D+5.2
A24 D+5.2
B24 D+5.2
A25 D-5.2
B25 D-5.2
A26 D-5.2
B26 D-5.2
A27 D-2V
B27 D-2V
A28 D-2V
B28 D-2V
A29 GND (D)
B29 GND (D)
A30 GND (D)
B30 GND (D)
A31 GND (D)
B31 GND (D)
A32 GND (D)
B32 GND (D)
A33 GND (D)
B33 GND (D)
A34 GND (D)
B34 GND (D)
A35 GND (D)
B35 GND (D)
A36 GND (D)
B36 GND (D)
A37 GND (D)
B37 GND (D)
A38 GND (D)
B38 GND (D)
A39 GND (D)
B39 GND (D)
A40 GND (D)
B40 GND (D)
XB

B-SS1647<09.>-XB


CN551
10P
CN555
10P
TO BM BOARD
CN317
TO H BOARD
CN6002
1
2
3
4
5
6
7
8
9
10
CN552
6P
CN556
6P
TO BM BOARD
CN315
TO H BOARD
CN6004
1
2
3
4
5
6
CN553
8P
CN557
8P
TO BM BOARD
CN316
TO H BOARD
CN6003
1
2
3
4
5
6
7
8
CN554
14P
CN558
14P
TO BM BOARD
CN314
TO LCD MODULE
1
2
3
4
5
6
7
8
9
10
11
12
13
14
XC

B-SS1647<09.>-XC

- Refer to page 10-90, 10-92 for Printed Wiring Board


CN310 2P WHT :S-MICRO
1 CVR-PROT-BA
2 CVR-PROT-CB
CN701 2P WHT-L :S-MICRO
S701
UB
CN311 3P WHT :S-MICRO
1 +13.5V
2 FAN-PROT-LCD
3 GND
TO FAN (LCD)
CN307 12P WHT :S-MICRO
1 LAMP-CONT1
2 GND
3 LAMP-PROT1
4 LAMP-CONT2
5 GND
6 LAMP-PROT2
7 LAMP-CONT3
8 GND
9 LAMP-PROT3
10 LAMP-CONT4
11 GND
12 LAMP-PROT4
TO LAMP
FAN-P-L
1 +13.5V
2 FAN-PROT-LP
3 GND
TO FAN (LAMP)
CN308 3P WHT :S-MICRO
CN601 4P WHT :S-MICRO
SUB5V
CVR-PROT-BA
CVR-PROT-AM
GND
PH601 EE-SX1071 ISOLATOR
R601 100 :CHIP
Q601 DTC144EKA SW
UA
TEMP-P-L
TH-FUSE
1 SUB5V
2 CVR-PROT-BA
3 CVR-PROT-AM
4 GND
5 TEMP-PROT-LP
6 GND
7 TH-FUSE
8 GND
CN313 8P WHT :S-MICRO
TEMP-PROT-LP
GND
TH-FUSE
GND
CN901 4P RED-L :S-MICRO
S901
F901 1A/250V
V
FAN-P-G
SIRCS-F
1 +13.5V
2 FAN-PROT-G
3 GND
4 SUB5V
5 SIRCS-F
6 GND
TO FAN (G)
TO N CN801
CN312 6P WHT :S-MICRO
1 LCD-D7
2 LCD-D6
3 LCD-D5
4 LCD-D4
5 LCD-D3
6 LCD-D2
7 LCD-D1
8 LCD-D0
9 LCD-E
10 LCD-R/W
11 LCD-RS
12 VLC
13 GND
14 LCD PS
CN314 14P WHT :S-MICRO
TO XC CN554
1 KEY0
2 KEY1
3 KEY2
4 KEY3
5 SIRCS-R
6 GND
CN315 6P WHT :S-MICRO
TO XC CN552
1 PWR-LED
2 LIGHT
3 SCL-H
4 SDA-H
5 D+5.2V
6 SUB5V
7 SUB5V
8 GND
CN316 8P WHT :S-MICRO
TO XC CN553
1 LCD CONT
2 LED-LMP1
3 LED-LMP2
4 LED-LMP3
5 LED-LMP4
6 LED-TEMP
7 LED-CVR
8 LED-FAN
9 LED-PWRSV
10 GND
CN317 10P WHT :S-MICRO
TO XC CN551
CN301
CN302
CN303
CN304
CN305
CN306
BM
(MOTHER)
B-SS1647<09.>-BM
1
2
3
4
5
A
B
C
D
E
F
G
H

The material contained in this manual consists of information that is the property of Sony Corporation. Sony Corporation expressly prohibits the duplication of any portion of this manual or the use thereof for any purpose other than the operation or maintenance of the equipment described in this manual without the express written permission of Sony Corporation.

Le matériel contenu dans ce manuel consiste en informations qui sont la propriété de Sony Corporation. Sony Corporation interdit formellement la copie de quelque partie que ce soit de ce manuel ou son emploi pour tout autre but que des opérations ou entretiens de l'équipement à moins d'une permission écrite de Sony Corporation.

Das in dieser Anleitung enthaltene Material besteht aus Informationen, die Eigentum der Sony Corporation sind. Die Sony Corporation untersagt ausdrücklich die Vervielfältigung jeglicher Teile dieser Anleitung oder den Gebrauch derselben für irgendeinen anderen Zweck als die Bedienung oder Wartung der in dieser Anleitung beschriebenen Ausrüstung ohne ausdrückliche schriftliche Erlaubnis der Sony Corporation.